GLOBAL
CONFERENCE
ON AI
AND HUMAN RIGHTS

ARTIFICIAL INTELLIGENCE AND HUMAN RIGHTS

CONFERENCE PROCEEDINGS FROM THE LJUBLJANA 2024 CONFERENCE

13 - 14 JUNE 2024

Faculty of Law, University of Ljubljana

Co-editors:
Dr. Vasilka Sancin
Dr. Maša Kovič Dine
Dr. Maruša T. Veber
Anže Mediževec, LL.M.

Artificial Intelligence and Human Rights

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Publisher: Litteralis Ltd

Published: June 2024, Ljubljana

This publication is part of the research project **Development and Use of Artificial Intelligence in Light of the Negative and Positive Obligations of the State to Guarantee the Right to Life** (J5-3107) lead by Professor dr. Vasilka Sancin and co-financed by the Slovenian Research and Innovation Agency - ARIS.

Kataložni zapis o publikaciji (CIP) pripravili v Narodni in univerzitetni knjižnici v Ljubljani

COBISS.SI-ID 200859651
ISBN 978-961-94303-9-2 (PDF)

About the Conference

The international interdisciplinary scientific conference organised over two days, featuring 16 panels with 90 speakers and additional 50 poster presenters, brought together established and younger experts from different parts of the World and diverse fields to explore and shape the future of design, development and use of artificial intelligence (AI) systems considering various impacts they may have on human rights.

This conference, set in a dynamic and collaborative environment, is designed to foster broad discussions among leading scientists, legal experts, policymakers, human rights activists, business sector representatives, students and others, with the aim to create a platform where innovative ideas meet practical solutions, ensuring AI's development and deployment align with the core values of human dignity, equality, security and justice.

Conference Chair:

VASILKA SANCIN, PhD, is a Full Professor of International Law, Head of Department of International Law and Director of the Institute for International Law and International Relations at University of Ljubljana, Faculty of Law (Slovenia). She is currently a member of the United Nations Human Rights Council Advisory Committee (2022-2025) and its Vice-Chair. She previously served as a member (2019-2022) and Vice-Chair of the United Nations Human Rights Committee and its Special Rapporteur for the Follow-up process to Concluding observations. Among others, she serves as ad hoc judge at the European Court of Human Rights; an arbitrator and a Bureau member of the Court of Conciliation and Arbitration within OSCE; an expert of the OSCE Moscow mechanism on Human Rights; and a member of the UNODC Anti-Corruption Academic (ACAD) Initiative. She (co)authored and (co)edited numerous articles/books in the field of international law, and, among other professional affiliations, acts as a President of the Slovene Branch of the International Law Association (ILA). She is a project leader of the basic research project titled Development and use of artificial intelligence in the light of negative and positive obligations of a State to ensure the right to life (J5-3107), co-financed by the Slovenian Research and Innovation Agency (ARIS).

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The Necessity of Comprehnsive, Inclusive and Interdisciplinary Tackling of the Artificial Intelligence – Human Rights Nexus

Prof. Dr. VASILKA SANCIN, Conference Chair

The introduction of artificial intelligence (AI) into our lives had brought about many positive developments, but also serious risks that deserve adequate attention and analysis, including through the lens of AI's impact on universally recognized human rights.

As these lines are being written, the new frontiers of AI technologies are raising pertinent questions that cannot be successfully addressed in ivory towers of individual scientific disciplines. This is why this global interdisciplinary conference,[1] organised under the patronage of UNESCO, brought together experts, researchers, academics, practitioners, governmental and non-governmental representatives, journalists, students and other interested public from all continents to join in a debate on contemporary challenges of the AI – human rights nexus.

The conference features an impressive introductory part with the opening remarks by the President of the Slovenian Parliament, Ms. Urška Klakočar Zupančič, attesting to the recognition and importance of the theme by the Slovenian highest authorities. The honour to be able to organise this conference under the patronage of UNESCO and the attention by the Assistant Director-General for Social and Human Sciences of UNESCO, Gabriela Ramos, who also contributed important welcome remarks demonstrate the international recognition of the timeliness and pertinence of the conference's contents. The global reach of the conference is further recognized by the Keynote Address delivered, on behalf of the President of the UN Human Rights Council, by H.E. Ambassador Marc Nicolas Jean Marie Bichler, Permanent Representative of Luxembourg to the UN in Geneva, titled *Human Rights – Universal Standards for a World with AI*. Finally, Louise Riondel, a Co-Secretary to the Council of Europe Committee on Artificial Intelligence, shared some thoughts on the Council of Europe Framework Convention on Artificial Intelligence, the first international treaty on AI and Human Rights, Democracy and the Rule of Law, with a potential of having important geopolitical impact. This contribution briefly explains the background leading to the adoption of the Convention, its structure and content. This impressive high-level support for the conference attests to the importance of the subject-matter discussed over the two days of interactive debates across 16 panels focusing on a myriad of human rights implications during the whole AI's life-cycle and numerous thought-provoking poster presentations.

The theme necessitates an interdisciplinary approach and the composition of chairs, speakers and poster presenters testifies to the efforts of the organisers to convene such an inclusive inter-disciplinary debate. Although complete comprehensiveness, in terms, of ensuring

[1] The conference is organised as a final event within the basic research project titled *Development and use of artificial intelligenec in the light of negative and positive obligations of a State to ensure the right to life* (J5-3107), co-financed by the Slovenian Research and Innovation Agency.

discussions on all the relevant concerns, cannot be achieved within a two-day conference, the variety of viewpoints on a plethora of pertinent topics showcases the broad spectrum of considerations that need to be adequately addressed and the diversity of stakeholders that can meaningfully contribute to such assessments.

In light of the above, the introductory lecture delivered by Marko Grobelnik – a distinguished scholar and researcher of the world-renowned Institute Jožef Stefan, which hosts International Research Centre on Artificial Intelligence (IRCAI) under the auspices of UNESCO – sketches the *Technical Aspects of AI Related to Human Rights*, introducing the technological aspect of the AI – human rights nexus.

The sixteen interdisciplinary composed panels feature many established presenters and scholars, as well as researchers and practitioners at earlier stages of their careers. The topics cover a variety of pertinent issues that need in-depth reflections and considerations by different stakeholders.

After some national normative developments and the adoption of legally non-binding instruments at the global level (*e.g.* 2019 OECD Recommendation of the Council on Artificial Intelligence, updated in 2024; 2021 UNESCO Recommendation on the Ethics of Artificial Intelligence), a much needed quantum leap occurred within the European context with the adoption of two legally binding documents addressing the AI and human rights nexus. In recognition of this, potentially ground-breaking normative and institutional development, it seemed somewhat organic to conceptualize Panel 1 as European oriented, particularly discussing recent legislative developments within the Council of Europe and the European Union in the field of AI and human rights. Gregor Strojin therefore builds upon the introductory remarks of Louise Riondel, highlighting a landmark adoption of the Council of Europe Framework Convention on Artificial Intelligence and juxtaposing it with the European Union's AI Act. Both legislative projects reflect the need to regulate the AI also internationally, and not only domestically. Verica Trstenjak, a former Advocate General of the European Court of Justice in Luxembourg, is most qualified to elaborate on the *AI, Human Rights and the Impact of the Court of Justice of the EU*. Continuing the debate on the EU AI Act, Ulf Haeussler provides an important and thought-provoking insight titled *Military Use of AI and Human Rights - A Dangerous Affair?*, while Federica Fedorczyk goes further by addressing the *Existential Risks: Threats to Individual Freedom and Risk of Digital Authoritarianism.* Last but not least in this panel, Dominik Brtna concludes by asking a very pertinent question in his contribution titled *AI Act and Real Time Tracking: Where is the Line?*

The remaining panels are organized around specific human rights implications of AI through diverse perspectives of different disciplines.

Panel 2 thus tackles AI's impacts on the right to health and healthcare, featuring Vida Groznik discussing a specific case study titled *Realizing the Right to Health by Using AI to Detect Early Signs of Diseases: The MCI Case Study*, Danaja Fabčič Povše turning to situations of public health emergencies and providing insights in a contribution titled *AI-driven Technologies in Public Health Emergencies: Going Beyond the DPIA to Address Human Rights Challenges*, and

Mengxuan Chen providing observations on *Effects of Robocare on Protecting the Dignity of Elderly People in Long-term Care Settings: Some Observation from Europe*.

Panel 3 attempts to contextualize the evolution of governance in AI revolutionized World. It features a crucial discussion on *Implementation of the UNESCO Recommendation on the Ethics of AI: From international instrument to policies and actions* by Angelica Fernandez from UNESCO, followed by a presentation on *Digital Human Rights and AI Governance* by Wolfgang Benedek. Alenka Gucek and Tanja Zdolsek Draksler explain the results of a particular multi-stakeholder research project in the presentation titled *Fostering Fundamental Human Rights and Trustworthiness though the Utilization of Emerging Technologies: the AI4Gov Platform*. Another insight from the same project is provided by Georgia Panagiotidou in her contribution titled *AI4GOV's Holistic Regulatory Framework: Empowering Democracy by Fostering Citizens' Trust and Participation with Artificial Intelligence*. Several mediatized examples of meddling in election processes through the use of new technologies raise important concerns about safeguarding free elections. Gizem Yardimci focuses on these challenges in a contribution titled *Protecting Free Elections in the Age of Political Bots: Assessing the AI Act in the Context of the European Convention on Human Rights*.

Panel 4 focuses on the use of AI in educational sector. Rob Chalmers opens the debate with an intriguing question *AI + Education: a new 'Diamond Age' or a threat to rights and values?* A new reality brought about with development of AI, particularly ubiquitously in the case of generative AI, necessitates serious attention, which are the topics of Paulius Pakutinskas in his presentation titled *How AI is Redefining Educational Paradigms*, Kannan Hemachandran's presentation providing insights into some experience generated in recent years in his contribution titled *Ensuring Human Rights in the Age of AI-Powered Education* and Sandra Fabijanić Gagro's discussion on the *Challenges in the Development and Use of AI in Education*.

Panel 5 is not shying away from providing some perspectives on AI and privacy. Silvia De Conca first speaks of AI-Powered Emotion Recognition: Human Rights Challenges and Implications. Since privacy issues outlive humans, Elwira Macierzyńska-Franaszczyk raises the question *Can AI Driven Technologies Become the New Trigger for Postmortem Privacy Protection?* Not only States are obligated to ensure the right to privacy, but so are international organisations expected to do the same. The contribution of Andraž A. Melanšek thus provides an important insight into *AI in the United Nations Peacekeeping Operations and Identification of Risks to the Right to Privacy*, while Maruša T. Veber discusses *International Humanitarian Organizations and the Use of AI: Identifying the Applicable Data Protection Legal Regime and Assessing the Role of the Individual Consent*.

Panel 6 turns to AI and the rights of women and children. Sara De Vido opens a debate on the AI implications on women, raising a concern with the phenomenon of *ICT-facilitated Violence Against Women as a Violation of Human Rights: Perspectives from Europe*. The other three debates focus on AI impacts on children, with Laura Guercio discussing *The Impact of AI on Children in Armed Conflict: A Dual-edged Sword*, Olena Krytska *The Use of AI in the Process of Restoring Children's Rights*, Mia Swart on *AI and Children's Right to Privacy*, and Maria Bertel providing also a forward-looking perspective on *AI, Children's Rights and Future Generations*.

Panel 7 evolves around the issues of AI, fair trial, right to effective remedy and access to justice. Thought-provoking *Initial Reflections on a (Potential) "Human Right to a Human Decision"* are provided by Michael Lysander Fremuth, followed by criminological perspective on *Fair Trial Implications of Algorithmic Justice* delivered by Aleš Završnik. Nóra Chronowski and Boldizsár Szentgáli-Tóth discuss *Trust or Distrust in AI as an Independent Court: Lessons of the Global Pandemic to be Learned*, while Konstantina Stavrou highlights important implications for international criminal justice in her topical contribution on *User-Generated Content and Deepfakes in International Criminal Proceedings*.

A conference would be missing an important building-block to a comprehensive debate, had it not included a panel on AI, human rights and environment, which is the subject-matter of Panel 8. Markus P. Beham provides an overview of the *AI and the Right to a Clean, Healthy and Sustainable Environment*, Lucia Bakošova continues the Panel 1 discussion, now through the environmental lens in her contribution titled *AI through EU and CoE Regulation in Relation to Right to Healthy Environment*. Shabnam Mahlawat focuses on air quality and addresses the issue of *AI: A Tool For Improved Air Quality Management for Realization for a Right of a Clean, Healthy and Sustainable Environment*, while Orsolya Johanna Sziebig delves on *Environmental Rights and AI – Hinder or Help in Building Green Democracies?*

Human rights are internationally recognized as applicable at all times, including in situations of armed conflicts. Panel 9 thus provides a platform for discussion on AI, military domain and respect of human rights in armed conflict situations. Petra Perišić raises some fundamental questions in her presentation on *The Weaponization of AI: Implications for Human Dignity*. Mária Fančovičová asks an important question *AI-DSS As a Lifesaver in Armed Conflict?*, Francesco Paolo Levantino deepens the debate with a topic of *Biometric-driven Security: IHRL and Theories of "Emotional Dominance" in Military Deployments* and Anikó Szalai pinpoints the importance of *Balancing Human Rights with the Help of AI – The Case of Online Hate Speech in the Time of Armed Conflict*.

Panel 10 reveals a variety of perspectives on AI and discrimination. Anka Supej and Olga Markič discuss *Fundamental Rights: A Way to Tackle Gender Bias in AI,* Keketso Kgomosotho suggests *Moving Beyond the Prohibited Grounds Approach: Towards New Approaches in the Legal Governance of AI Algorithmic Discrimination*, and Kitti Mezei and Anikó Träger provide specialized insights on *Algorithmically Coded Biases and Regulatory Response – Labour and Healthcare*.

Perhaps more futuristic debates are the context of Panel 11 focusing on AI and human rights in the metaverse. Maria O'Sullivan sets the scene with the presentation on *AI and Human Rights in the Metaverse*. Gregor Dugar raises important issues by asking *AI and Personal Digital Twin: Who has the Rights?* Anže Mediževec discusses the potential future concerns surrounding *AI Technology as a Legal Entity and its Protection from Discrimination*. A macro-perspective on the AI challenges is brought about by Roberto Navarro-Dolmestch in his contribution on *A Macro-threat Approach to Human Rights Posed by AI Capitalism*.

Panel 12 discusses another societal reality, the use of AI in regulation of migration. Andreas Müller presents views on *The Use of AI in the Fields of Asylum and Migration and Human*

Rights: The Intricacies of the Public-Private Divide. Sanzhuan Guo and Tim McFarland provide an overview of *AI and Migration: Framework for Understanding Automated Decision Making and Regulation*. Tamas Molnar brings in the EU perspective by addressing *Algorithmic Decision-making in Migration and Security in the EU: Challenges in Ensuring Effective Legal Remedies*. Špela Bibič raises an essential question for the individual asylum seekers discussing *AI and the Right to Interpretation in the Asylum Procedure: Friend or Foe?*

Panel 13 goes into challenges brought about by AI in law enforcement. Anastasia Nefeli Vidaki discusses *Algorithmic Facial Recognition in Criminal Justice and Presumption of Innocence*, Jess Peake asks *Does AI Pose a Challenge to the Transformational Potential of Digital Evidence?,* while Anton Gradišek and Gizem Gültekin-Várkonyi present *Expert Opinions on the Application of the AI Act on the Use of Personal Data for Law Enforcement Purposes*.

Panel 14 presents a dilemma emerging in the field of *AI and intellectual property: Is it a revolution or robbery?*, Maja Bogataj Jančič asks *Can Copyright Bring Generative AI to its Knees?*, Zachary Cooper provides views on *The Infinite Artist: Endless Challenges in Framing Copyrightable "Works" in EU Copyright Frameworks*, Matija Damjan wonders on *Human Actors and Synthetic Performers: Whose Rights are Infringed?* and Žiga Škorjanc on *Training AI Models: A Case for Collective Rights Management?*

Panel 15 brings us to the pertinent questions linked to different spaces: terrestrial and outer space. The first two presentation remain on our planet. Christina Binder discusses *Smart Cities and the Current Challenges to Modern Urban Living: Approaches of the European Urban Charter III (2023)*, while Maša Kovič Dine contemplates on *AI and Public Participation: Can the Smart Cities' models be Applied to the Right to Participate in Environmental Decision-Making?* We are then launched into outer space with Iva Ramuš Cvetkovič presenting on *AI-enhanced Space Technology and its Effects on Human Rights* and Katja Grünfeld wondering about *AI and Space Settlement: Guaranteeing the Right to Life?*

Last, but not least, Panel 16 presents various national and regional approaches to AI. John C. Mubangizi presents *AI and the Right to Life: A Perspective from Selected African Countries*, Placidia Vavirai a concrete discussion on *Realization of the Right to Water in Zimbabwe using AI*, Sheetal Gahlot and Kanwal DP Singh discuss *Corporate Governance in Indian Manufacturing Sector: Study of intersection of AI and Human Rights*, Yukari Ando speaks on *AI and Human Rights in Japan* and Theodore Chadjipadelis about *Equal Access to Public Services: A study on AI's in Greek Municipalities*.

The programme reveals also an extremely rich list of topics presented as poster presentations, raising many innovative ideas and critical perspectives, deserving of further attention in future debates.

The preparations for the conference over the last three years necessitated countless hours of dedicated attention to every possible detail from many individuals, but mostly my incredible colleagues at the Department of International Law, who are also members of the organising committee of the conference and co-editors of these conference proceedings. Special appreciation is due also to Tadeja Urbas, who was a member of the team in the early stages of the preparations. Undoubtedly, the conference's success depends on the contributions of

each panellist, poster presenter and panel chairperson, who committed intellectually and physically to travel to Ljubljana and engage in this unique comprehensive and inclusive – intercontinental and intergenerational – interdisciplinary debate. Finally, another pillar of the conference are all the supporters, financial or otherwise, who are presented with their logos in these conference proceedings. I am deeply indebted to everyone concerned.

WELCOME REMARKS

GABRIELA RAMOS, Assistant Director-General for Social and Human Sciences of UNESCO, in her video address for the Conference observed:

"Over the next two days, you have gathered in Ljubljana as leading experts from around the world to examine one of the most pressing issues facing humanity - understanding and addressing the human rights implications of artificial intelligence.

AI technologies are developing at a breathtaking pace and being applied across virtually every domain, from healthcare and education to law enforcement and military operations. While AI offers tremendous potential benefits, it also raises profound ethical concerns and risks to human rights that must be carefully considered and mitigated.

The UNESCO Recommendation on the Ethics of Artificial Intelligence provides the first global normative instrument on the ethics of AI adopted by 193 Member States in 2021. It promotes a humanistic and human-rights-based approach by defining common values and principles to guide the development and use of these transformative technologies. The Recommendation was globally accepted as an ethical standard for AI technology in full respect of human rights law and with the idea that human rights and fundamental freedoms must be respected, protected, and promoted throughout the life cycle of AI systems. New technologies need to provide new means to advocate, defend, and exercise human rights and not to infringe them.

As we navigate the complex human rights impacts of AI systems, the Recommendation serves as an important ethical framework and foundation. It is my sincere hope it will guide your discussions and reflections on the critical issue of the protection of human rights and dignity.

Lately, the focus of global discussions has been on safety. Safety is important, as mentioned in the Recommendation, but we should not forget that the traditional concerns that AI has raised, in terms of the reproduction of biases and discrimination and the many ways in which it threatens human rights, continue to be present. This is not a minor consideration.

For this reason, I am glad to see that throughout this conference you will explore the intersections between AI systems and a wide range of human rights - the right to life, health, privacy, due process, non-discrimination, and many more. You will have the opportunity to unpack challenges from AI's use in public services and environmental policies to its military applications and intellectual property ramifications. And you will grapple with grey areas like emotional AI, the metaverse's virtual worlds, and the rise of hyper-personalized technology that both empowers and raises risks to human rights.

These discussions evidence that the ethical development of AI is both a necessity and an opportunity to reaffirm our moral and legal commitments to human dignity, and freedoms in the digital age. Ultimately, the goal is to help advance rigorous governance frameworks, institutions, and multi-stakeholder collaborations to ensure artificial intelligence remains

human-centered and respects universal human rights as these powerful technologies continue to evolve.

I encourage each one of you to engage actively and ask tough questions throughout these two days when approaching this vital dialogue.

I also invite you to join UNESCO's efforts in the field of AI. Visit our Observatory for Ethical AI that we launched with the ITU and the Alan Turing Institute; and engage with our Women4Ethical AI network, the AI Ethics Experts without Borders and the Global Forum on the Ethics of AI. We are all learning, and there is so much at stake to get the digital transformation right".

COUNCIL OF EUROPE FRAMEWORK CONVENTION ON ARTIFICIAL INTELLIGENCE AND HUMAN RIGHTS, DEMOCRACY AND THE RULE OF LAW

LOUISE RIONDEL, Co-Secretary to the Council of Europe Committee on Artificial Intelligence**,** provided the following thoughts for the Conference paricipants:

The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law was adopted on 17 May 2024, becoming the first-ever international legally binding treaty in this field.

The instrument came to life to address the fact that artificial intelligence (AI), like other digital technologies before it, offers humanity great possibilities but also comes with serious potential risks to the enjoyment of human rights, the functioning of democracy, and the observance of rule of law. Unmet expectations concerning the promised benefits paired to the exaggerated doomsday scenarios foreseen have led to the current climate of general distrust in AI. As the continent's leading human rights organisation, the Council of Europe has long concerned itself with the negative impact of technology and undertaken to address these risks through its pioneer norms and standards in a comprehensive manner which is also conducive to innovation, in order to foster the safe and responsible development of AI, and prevent its misuse.

As early as 1981, the Council of Europe addressed the issue of data protection with the adoption of the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data. The Cybercrime Convention has been providing responses to complex challenges of crime in cyberspace since 2001.

Naturally, as we witnessed the rapid proliferation of the use of AI in our everyday lives, the Council of Europe established in 2019 an ad hoc Committee on Artificial Intelligence (CAHAI) to explore the need for, and feasibility of, regulating AI in international law covering the areas of human rights, democracy and the rule of law. In the course of 2020 and 2021, the CAHAI delivered a feasibility study pointing to the need for regulating the interplay between AI technologies and human rights, democracy and the rule of law, as well as a compilation of legal elements recommended to be included in a treaty.

In 2022, the Committee on Artificial Intelligence (CAI) was set up by the Committee of Ministers with the mandate to establish an international negotiation on a set of legally binding and non-legally binding instruments to regulate AI. The CAI's first task was to draft the first international legally binding treaty in this field and to make it future-proof, but also conducive to technological progress and innovation.

In order to do so, the CAI brought together the 46 Member States of the Council of Europe, the European Union, the Observer States with the Council of Europe (Canada, Japan, the Holy See, Mexico and the United States of America) and a number of non-Member States (Australia, Argentina, Costa Rica, Israel, Peru and Uruguay), actively and constructively participating in the negotiations. 68 non-State Observers representing civil society, academia and industry also contributed to the negotiations.

Over a period of two years, the Committee held a total of 10 Plenary meetings and a series of formal and informal Drafting Group sessions devoted to the negotiation of the draft treaty, which was unanimously agreed upon on 14 March 2024. The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law was adopted on 17 May 2024 by the Committee of Ministers of the Council of Europe at its 133th Session held in Strasbourg, and will be opened for signature on the occasion of the Conference of Ministers of Justice in Vilnius (Lithuania) on 5 September 2024.

The Framework Convention formulates fundamental principles and rules which not only safeguard human rights, democracy and the rule of law but at the same time are conducive to progress and technological innovations. It sets out fundamental principles and rules with which AI systems must comply: human dignity and individual autonomy, transparency and oversight, accountability and responsibility, equality and non-discrimination, privacy and personal data protection, reliability, and safe innovation.

The instrument further lists the obligations of Parties pertaining to the availability and accessibility of remedies and procedural safeguards in the context of activities within the lifecycle of AI systems, and sets out requirements in terms of the assessment and mitigation of risks and adverse impacts stemming from AI systems.

Finally, the Framework Convention establishes a Conference of the Parties to provide the necessary follow-up with regard to the implementation of the treaty. It also obliges Parties to establish international co-operation and information exchange, a reporting mechanism, and effective oversight mechanisms at the domestic level.

Given the high level at which it is operating and in order to remain future proof, the Framework Convention, does not regulate technology and is essentially technology neutral. It is complementary to existing international human rights, democracy and rule of law standards and aims at fleshing out the questions that may have emerged as a result of rapid technological advances in the sphere of human rights law, and with regards to the protection of democracy.

The importance of the Framework Convention also lays in its potential geopolitical impact. This treaty is the outcome of the concerted efforts of likeminded democratic governments from various parts of the world, aiming at harnessing AI for good and protecting individuals against its potential perils. In this way, and much like other aforementioned relevant Council of Europe conventions addressing digital technologies which have become global benchmarks

in their field, the treaty provides an unprecedented level legal playing field for global cooperation, including between Europe and other regions of the world."

TECHNICAL ASPECTS OF AI RELATED TO HUMAN RIGHTS

Introductory Lecture by MARKO GROBELNIK

Jožef Stefan Institute

AI systems are not abstract concepts but concrete technologies with algorithms designed to produce results. Recent advancements in AI have been driven by several specific innovations combined with an unprecedented scale of data and computing power. In this presentation, we will discuss key elements of recent AI systems that could either empower or endanger human rights and, more broadly, societal life. Additionally, we will address the potential future evolution of AI technology and identify elements that may become critical in the foreseeable future.

Keywords: AI systems, algorithms, computing power, human rights, societal life

Biography

Marko Grobelnik is a researcher in the field of Artificial Intelligence (AI). Focused areas of expertise are Machine Learning, Data/Text/Web Mining, Network Analysis, Semantic Technologies, Deep Text Understanding, and Data Visualization. Marko co-leads Artificial Intelligence Lab at Jozef Stefan Institute, cofounded UNESCO International Research Center on AI (IRCAI), and is the CEO of Quintelligence.com specialized in solving complex AI tasks for the commercial world. He collaborates with major European academic institutions and major industries such as Bloomberg, British Telecom, European Commission, Microsoft Research, New York Times, OECD. Marko is co-author of several books, co-founder of several start-ups and is/was involved into over 100 EU funded research projects in various fields of Artificial Intelligence. Significant organisational activities include Marko being general chair of LREC2016 and TheWebConf2021 conferences. Marko represents Slovenia in OECD AI Committee (AIGO/ONEAI), in Council of Europe Committee on AI (CAHAI/CAI), NATO (DARB), and Global Partnership on AI (GPAI). In 2016 Marko became Digital Champion of Slovenia at European Commission.

PANEL 1 AI AND HUMAN RIGHTS DEVELOPMENTS WITHIN THE COUNCIL OF EUROPE AND THE EUROPEAN UNION

A Brief Analysis of the Development of the Council of Europe and European Union Binding Legal Instruments on AI

Gregor Strojin
Vice-Chair of the Committee on Artificial Intelligence at the Council of Europe

Both the Council of Europe Framework Convention on Artificial Intelligence (AI Treaty) and the European Union Regulation on AI (AI Act) are currently (as of March 2024) nearing adoption. The conceptual foundation, preparation and development process of these pioneering and key international initiatives for a binding regulation of the design, development and use of AI were primarily based on the effects of the technology's use on human rights, and built on the experiences and applications of prior human rights instruments in other technological areas. While initially based on horizontal, risk-based, proportionate, future-proof, and tech-neutral approaches, both instruments were influenced throughout the negotiations by unique elements relating to technology, commercialization, constitutional and political organization, and various strategic interests. As we approach the finalization of the legislative process, it is worth examining some of these elements, their impact on the final texts and the potential for future effectiveness of the instruments.

Keywords: Council of Europe, European Union, AI Treaty, Framework convention, AI Act, AI development and use, strategic interests

Biography

Gregor Strojin is a Local Partner with Deloitte Legal Reff in Slovenia and heads the Deloitte Legal Central Europe AI Regulatory Center of Excellence, primarily focusing on AI alignment, compliance, and governance activities.

He has more than 20 years of experience in the crossroads of technology, information, and law from theoretical, practical and policy perspectives. In particular, he has extensive experience in the field of AI regulations. From 2019, he served as the Chair of the Council of Europe Ad Hoc Committee on Artificial Intelligence (CAHAI) which prepared the groundwork for the Framework Convention on AI, and the Vice-Chair of the subsequent Committee on AI (CAI), which completed the negotiations on it in March 2024. He also worked on the CEPEJ Ethical Charter for the use of AI in judicial systems (2018) and was involved with the development of the EU AI Act. In Slovenia, he primarily worked with the Supreme Court and also served as a State Secretary at the Ministry of Justice. He contributed to a number of transformation and governance projects supporting judiciaries and governments, primarily in knowledge management and process automation.

AI, Human Rights and the Impact of the Court of Justice of the EU

Verica Trstenjak

Professor of European Law in Vienna (Austria) and Ljubljana (Slovenia), former Advocate General at the Court of Justice of the EU

Artificial intelligence has had a significant impact on all areas of our lives. It has a particularly significant impact on all areas of law and also on the work of lawyers. One important area in this respect is the impact of artificial intelligence on human rights. Conversely, human rights also influence, or at least should influence, the development of artificial intelligence. The case law of the Court of Justice of the EU (CJEU) has an important role to play in guiding this development at EU level. This applies in particular to the impact of the protection of personal data and privacy on the one hand, but also to the rights of enterprises. The latter often refer to the freedom to conduct business and also freedom to information. The CJEU has also ruled, at least indirectly, on the impact of artificial intelligence on these rights in a number of cases. Of particular relevance is the December 2023 ruling C-634/21 concerning automated individual decision-making. The CJEU had to decide on the restrictions which the GDPR imposes on the economic activity in the financial sector but also clarify the provision of Article 22 GDPR, that the data subject shall have the right not to be subject to a decision based solely on automated processing (including profiling), in the cases that this produces legal effects concerning him.

Keywords: Artificial intelligence, human rights, law, data protection, GDPR. Court of Justice of the EU

Biography

Verica Trstenjak, former Advocate General of the European Court of Justice in Luxembourg. Prof. dr. Verica Trstenjak (national of Slovenia, based in Austria, Vienna) is a lawyer and former Advocate General of the European Court of Justice in Luxembourg and former judge at the General Court of the European Union in Luxembourg. She is professor of European Union law in Austria and Slovenia. From 2019 she is member of the Permanent Court of arbitration in The Hague and from 2019 also arbiter on the list VIAC (Vienna International arbitration Centre). She is also conciliator at the Court of Conciliation and Arbitration within the OSCE (Organisation for Security and Co-operation in Europe) and member of the Bureau at this Court (from 2019). From 2017 she was Member of Management Board and from October 2017 also Member of Executive Board of the EU Agency for fundamental rights (until 2022). She is also a member of the advisory Board (comparable with arbitration) of the international organization Energy community and an external scientific member of the Max Planck Institute Luxembourg and now in Hamburg. She was a substitute member of Venice Commission (Council of Europe, 2020-2024)and she is a vice-president of the ethics commission by the Slovenian Olympic Committee. She is also an arbitrator at the biggest international arbitration

ICSID-International Centre for Settlement of Investment Disputes and she is arbitrator and TSD Expert on the EU Commission list for disputes under the EU`s trade agreements with third parties. She is a member of two international academies of science: Academia Europaea (Academy of Europe), with the seat in London and European Academy of Science and Art with the seat in Salzburg (Austria).

She has written expert opinions for law firms and arbitration in many cases concerning European law and legal protection in the EU. In 2020 she got an Austrian state decoration from Austrian President van der Bellen: Cross of Honour for Science and Art, First Class.

Military Use of AI and Human Rights - A Dangerous Affair?

Ulf Haeussler
Federal Ministry of Defence, Germany

Following political agreement, the EU's "Artificial Intelligence Act" (AI Act) will soon be adopted to create a market for artificial intelligence geared towards consumer protection, data protection, and protections against certain uses of AI in law enforcement. The implications of this act on, inter alia, the defence sector have been rather contentious, specifically concerning its applicability to military uses. The AI Act may significantly impact the overall life-cycle of defence - research, development, testing, adoption, acquisition, and use of AI across the whole range of military activities, and for deterrence and defence. The AI Act will limit EU Member States's options for sourcing AI-based solutions for their armed forces from EU-based providers, equivalent to unilateral arms control, through legislation concerning internal market, industrial policy, and technology governance. This effect may be compounded by different supranational EU legislation, e.g., the criteria for environmental and social governance which may deprive commercial entities interested in providing AI-based solutions to armed forces of critical financial liquidity. This likely effect may have serious implications for human rights law. First, it might adversely affect the protection of the rights to life and health of personnel in the armed forces lacking AI-based capabilities but facing those of strategic competitors or potential adversaries. Second, lacking AI as a force enabler and multiplier, States' capacity to protect and ensure the human rights of their peoples through deterrence and defence is reduced. This approach reflects a genuine perspective on the interrelationships between different human rights, displayed through the selection of the rights considered during the legislative process concerning the AI Act and how they were eventually balanced. On this basis, the author will develop first impressions on the relationships between human rights, the law of armed conflict, and arms control law with respect to military uses of artificial intelligence.

Keywords: AI Act (European Union), precautionary principle, unilateral arms control, military capabilities, balancing human rights, technology governance

Biography

Ulf Haeussler is the Editor-in-Chief of the German Military Law Review and a member of the workforce of the Federal Ministry of Defence of the Federal Republic of Germany. His current and recent assignments have focused on legal aspects of defence innovation, European Union Law, and international law. His additional focus areas include international space law (as a core expert of the MILAMOS project) as well as the relationship between international law and nuclear strategy (as a member of the former ILA Committee on Nuclear weapons, non proliferation & contemporary international law). He is also a member of the Board of Directors of the International Society for Military Law and the Law of War.

Addressing Existential Risks: Threats to Individual Freedom and Risk of Digital Authoritarianism

Federica Fedorczyk
Research fellow at EURA, European Jean Monnet Center of Excellence on the Regulation of Robotics & AI at Sant'Anna School of Advanced Studies in Pisa

At the present stage, a notable deficiency within the AI Act concerns its treatment of existential risks, a category of long-term risks explicitly unaddressed by the proposal. Even though stakeholders, researchers, ethicists, and technologists have expressed the need for a commitment to identify, manage, and monitor global existential risks connected to AI, the AI Act primarily targets the immediate risks from AI, rather than broader and long-term ones. With this paper the Author intends to detect the gap in addressing similar risks in the current EU regulation. Specifically, the Author focuses on risks associated with the misuse of AI that could provoke the rise of new forms of digital authoritarianism with serious threats to individual freedom. For instance, remote and real-time biometric identification, selected forms of predictive policing and emotion recognition for law enforcement purposes are still allowed at certain conditions in the final version of the Act the EU agreed on at the end of the trilogue negotiations. The final version of the text has not been published but it appears to lack a comprehensive long-term perspective. The utilization of AI for state surveillance purposes, along with its potential threats to individual freedom, has only been partially addressed. The Author believes that raising awareness on this issue is crucial since there is a concrete risk of a shift towards securitarian criminal law and law enforcement, where AI tools are used with the main task of social control and management of social interactions. Indeed, new forms of digital authoritarianism can pose a serious long-term risk as they can significantly undermine the overall well-being of humanity by threatening not only individual freedom but also human dignity at its core.

Keywords: AI Act; digital authoritarianism; existential risks; biometric identification; predictive policing; emotion recognition; law enforcement.

Biography

Federica Fedorczyk is a lawyer and a Ph.D. Candidate in Criminal Law at Sant'Anna School of Advanced Studies in Pisa. She has a deep interest in the intersection between AI and the criminal justice system and her PhD thesis focuses on how the use of AI could provoke a change in the traditional categories of liberal criminal law. Her main research interests include existential risks related to AI and new forms of digital authoritarianism, the innovative concept of smart prisons, and gender-based crimes and gender discriminations.

Last year she was Visiting Researcher Fellow at Fordham Law School in New York City and next year she will be a Fellow Visiting Researcher at Max Planck Institute for the Study of Crime, Security and Law in Freiburg.

AI Act and Real Time Tracking: Where is the Line?

Dominik Brtna
PhD Student, Law Faculty, Charles University

The AI Act as proposed by the Commission offered certain limited and exceptional avenue for real-time- tracking of certain persons based on their biometrics. Otherwise, it's been deemed as prohibited practice. The latest amendments by the EP significantly changed this exception and provided new safeguards, allowing only for 'post' remote identification, banning real time tracking (RTT). This exception can be found in the new Art. 5 paragraph 1 point (d) (d), subjected to a pre-judicial authorisation for criminal offenses defined in Article 83(1) TFEU, which is a broad category. As opposed to the original proposal, where the conditions for allowing RTT were detailed, what *pre-judicial* means is unanswered. Not even in the relevant recital. This allows for 'unchecked' authorisation by law enforcement, whereas previously generally a judge's approval was required, leading to a setback. This raises important and interesting questions, especially in relation to the right to a fair trial and the right to private life (both under the CFR and the ECHR). The main question remains, where is the line? Author's reading is that the new exception still allows for 'near' real time tracking, not requiring any significant delay, only necessity and authorisation. AI can prove to be such a powerful tool, that it cannot be replaced with any other tool or method on such a scale. The subsequent safeguards provide more comprehensive protection than previously, introducing new complaint process. Still, it leaves area of legal uncertainty both for law enforcement and for citizens.

Keywords: Artificial intelligence, real time tracking, right to fair trial, human rights, exceptional circumstances, right to private life

Biography

Author finished his graduate studies in January 2023. In his studies he focused on international law and criminal law. In the area of international law his main focus was on human rights, especially in European area. Topic of diploma thesis was: The Accession of the European Union to the European Convention on Human Rights. Author was admitted to postgraduate program at the Faculty of Law of Charles University, Department of International Law. Currently is pursuing research into the intersection between AI, international law and human rights.

PANEL 2 AI, RIGHT TO HEALTH AND HEALTHCARE

Realizing the Right to Health by Using AI to Detect Early Signs of Diseases: The MCI Case Study

Vida Groznik
Faculty of Computer and Information Science, University of Ljubljana

Over 55 million people live with some form of dementia, making it the most prevalent neurodegenerative disease worldwide. According to Alzheimer's Disease International, "up to three-quarters of those with dementia worldwide have not received a diagnosis." Mild cognitive impairment (MCI) is an early stage where symptoms are not yet severe, but approximately 10-15% of individuals with MCI progress to Alzheimer's dementia annually. Early detection of MCI is crucial, as emerging disease-modifying therapies could significantly delay the progression to dementia if administered promptly. With the help of artificial intelligence (AI), we can analyse large amounts of patient data and identify early signs of neurodegenerative conditions. One promising approach to early detection involves using eye-tracking technology to observe oculomotor movements during neuropsychological tasks, which can serve as biomarkers for MCI. In a clinical study conducted in Slovenia, 105 participants underwent comprehensive neurological and psychological evaluations. Based on these evaluations, participants were categorised into cognitively impaired and healthy control groups. During the study, participants completed various tasks on a computer screen, such as smooth pursuit dot tracking, reading, tasks involving saccadic movements, and a modified version of the Corsi block-tapping test, using only their gaze. Eye movements were recorded using a 90Hz screen-based eye-tracker. Using domain knowledge, we extracted over 90 features from the raw data, which were then further analysed using several different AI algorithms. We built several prediction models, among them a random forest classifier with 80% classification accuracy and an area under the ROC curve of 85%.

Keywords: Mild cognitive impairment (MCI), early disease detection, eye-tracking, artificial intelligence, machine learning

Biography

Dr. Vida Groznik is an Assistant Professor at the University of Ljubljana, specialising in AI applications in healthcare and education. She earned her PhD in Computer and Information Science in 2018, with research focused on using AI to detect Parkinsonian tremor. Her interests include AI in medicine, expert systems, machine learning, and medical informatics, areas she incorporates into her teaching and supervision of PhD and master's students. Dr. Groznik is also CEO of NEUS Diagnostics, advancing non-invasive medical technologies through innovative AI methods. Her leadership contributed to the success of the premiere European Summer School on AI in 2023. Dr. Groznik actively participates in major international projects

like MSCA-ITN project PARENT and MSCA COFUND project SMASH, promoting the integration of AI in healthcare

AI-driven Technologies in Public Health Emergencies: Going Beyond the DPIA to Address Human Rights Challenges

Danaja Fabčič Povše
Health and Aging Law Lab/Law, Science, Technology and Society research group, Free University of Brussels (Vrije Universiteit Brussel)

Public health responses based on AI-driven technologies, such as machine learning, predictive modelling, sensors, and apps, rely on mass collection of data and intricate statistical methods. Legal obligations such as data protection impact assessment (DPIA) demonstrate the technology's compliance and address its impact on privacy; however, DPIAs are limited in scope and application, meaning some human rights aspects are not addressed. Drawing on experience from the covid-19 pandemic and our project on urban air pollution, this paper suggests additional measures that policy-makers and deployers could consider. The goal is to inform future public health responses and contribute to the growing scholarship of data-driven public health law, with a view toward pandemic preparedness and climate change. This paper will answer the following RQ: *How to improve the shortcomings of a solely DPIA approach to address human rights challenges when AI-driven technologies are used to manage public health emergencies, such as pandemics and air pollution?* The shortcomings will be discussed in the light of data protection within public health legal background, and suggestions to improve the human rights-oriented response will be discussed. The first option is to the impact assessment to extend beyond privacy and data protection, taking into account the impact of the AI on freedoms and interests such as safety, autonomy and dignity, and non-discrimination, thus creating a comprehensive AI impact assessment (AI-IA). Next, bottom-up approaches will be considered, drawing upon the importance of co-design in medical technologies and the contribution of citizen science to tackling air pollution and covid-19 pandemic. Further, the data involved in the technology must be representative and inclusive, following the requirement of data accuracy in the GDPR, as well as the requirements of the upcoming AI Act, currently in the trialogue procedure. Finally, policy-makers should counter the risks of exclusion, discrimination and inequality.

Keywords: Public health, DPIA, human rights, AI impact assessment, GDPR, AI Act

Biography

Danaja is a doctoral researcher at the Law, Science, Technology and Society (LSTS) research group and a member of the Health and Ageing Law Lab (HALL). She started her position in March 2021 under the supervision of prof. Paul Quinn.

Previously, she worked as a researcher at the Centre for IT & IP law at the KU Leuven, where she acted as a legal and ethical advisor in Horizon 2020 funded projects (FENTEC – Functional encryption technologies, COMPACT – Cybersecurity for public administrations, DOGANA –

Advanced social engineering vulnerability assessment), and published scientific articles on data protection and cybersecurity.

She holds a LLM degree in International and European business law from KU Leuven (2017, cum laude) and a master's degree in law from University of Ljubljana (2016, cum laude).

Effects of Robocare on Protecting the Dignity of Elderly People in Long-term Care Settings: Some Observation from Europe

Mengxuan Chen
PhD student at the Faculty of Law and Political Science, University of Szeged

Europe is experiencing population ageing due to low birth rates and longer lifespans. Eurostat's 2020 projections indicate that the elderly population, especially those aged 80 or over, is growing rapidly, expected to increase 2.5 times by 2100. As the number of older and disabled adults increases, so does the need for long-term care. And developments in artificial intelligence technology are transforming the healthcare industry and are beginning to be applied to long-term care. The demographic shift poses significant socio-economic challenges, including pressure on families and governments to manage rising medical costs and stress on health systems. At the same time, ageist communication patterns, inaccurate diagnosis, neglect of needs, allocation of medical procedures based on age and abuse of the elderly also reflect poor quality of care, which underscores the growing importance of robocare. The revised European Social Charter (1996), a key human social rights instrument, was the first international convention to address care for older individuals. Article 23 of the Revised Social Charter or Article 4 of the 1988 Additional Protocol commits to enabling older persons to maintain full societal participation. This includes supporting their independent living at home by adjusting housing and providing necessary healthcare. Even though there is no explicit right to long-term care for older individuals, elderly people have the right to choose the type of care they receive, particularly in the context of dignity, autonomy, and participation. This article will be analysed through several typical European countries and regions, present a theory of the role of robocare in preserving the dignity and upholding the human rights of elderly people, as well as explore whether robots can in some way reduce the violation of the dignity of elderly people in long-term care settings. In particular, the use of assistive or service robots in long-term care settings, where many of the daily activities of older persons are performed in isolation, can reduce the use of human labour and protect the dignity of the elderly by reducing, to a certain extent, the incidence of inequality and discrimination. The aim of this paper is to explore the potential role of robocare in protecting the dignity of elderly people in Europe. This paper will examine the following research questions: 1. How is the dignity of elderly people violated in long-term care settings in Europe? 2. How can robocare protect the dignity of elderly people in long-term care settings from a human rights perspective?

Keywords: Robocare, Long-term care, Human Rights, European Social Charter, Dignity

Biography

Mengxuan CHEN is a PhD student at the University of Szeged, Hungary, specializing in Social Security Law, particularly long-term care and robocare. She has published three articles, with four more under review, and has participated in 14 relevant conferences and seminars. She is involved in the project "The Impact of Artificial Intelligence on the Future of Work and the Labour Market" (May 2023 - August 2026), focusing on service robots in elderly care, labour

market evolution, HR challenges, emotion management, and ethical concerns. She is also a member of the 2023/2024 cohort of the Regional Academy of the United Nations (RAUN), working with the UNODC on the misuse of prescribed medications among the elderly. Starting in May 2024, She joined the Global Alliance for Ethics and Impact of Artificial Intelligence (GAEIA), initiated by the Stanford Center for Human Rights and International Justice, to work on AI and elderly care. She is fluent in Chinese, English, and Korean.

PANEL 3 AI AND GOVERNANCE

Implementation of the UNESCO Recommendation on the Ethics of AI: From international instrument to policies and actions

Angelica Fernandez
AI Ethics Unit of the Social and Human Sciences Sector at UNESCO, Project Coordinator "Supervising AI by Competent Authorities"

This presentation aims to examine the progress of implementing the UNESCO Recommendation on the Ethics of Artificial Intelligence, focusing on the transition from principles to practical implementation at the global, regional, and country levels. The implementation progress of the Recommendation is analyzed through the deployment of the Readiness Assessment Methodology (RAM) in collaboration with the Member States in over 50 countries, the piloting of the Ethical Impact Assessment tool in selected cases, and the many collaborative projects with governmental and non-governmental stakeholders. In the EU, the implementation of UNESCO's Recommendation on the Ethics of AI is also articulated through projects. Notably, the project "Supervising AI by Competent Authorities" resulted from a partnership between the European Commission-DG Reform and the Dutch Authority for Digital Infrastructure (RDI). This project is an excellent case study of the challenges of operationalizing legal and ethical requirements for regulating AI systems. This presentation will explore selected aspects of this ongoing project.

Keywords: UNESCO Recommendations, Ethics of AI, Ethics, RAM, RDI

Digital Human Rights and AI Governance

Wolfgang Benedek
Former director of Institute of International Law and International Relations and of the European Training and Research Centre for Human Rights and Democracy (ETC) of University of Graz

The emergence of ever more sophisticated applications of AI creates new challenges for the protection of human rights. Those range from the amplification of disinformation, hate speech and discriminatory bias to surveillance and deep fakes with a disruptive potential for society and democracy. They are affecting core human rights like freedom of expression and information and the right to privacy and data protection. However, the developments in the field of AI like ChatGPT in particular have stimulated a debate whether there is a need for new digital human rights. International organizations like the Council of Europe and the EU, but also national states like the USA have engaged into a regulatory competition of the new challenges. Global organizations are also responding like UNESCO with recommendations on the ethics of AI or the United Nations with the forthcoming Global Digital Compact. The UN High-Level Advisory Body for Artificial Intelligence created in 2023 has identified several AI principles and governance functions, incl. the possibility of a new UN agency. Soft and hard law approaches are to complement each other. A multistakeholder approach to AI governance includes also the private sector, civil society and the technical community some of which propagate a digital humanism approach. New digital human rights are derived from existing offline rights or from novel protection needs. Examples are the right to informational self-determination, the right to be forgotten or the right to be informed when interacting with AI and to human oversight. For example, the AIA in Article 50 provides for several transparency obligations like the disclosure of interacting with an AI system including the use of deepfakes or the prohibition of biometric categorization in public places or social scoring. A comparison of international and national regulation efforts provides insights into the present state of governance of AI and future challenges.

Keywords: Artificial Intelligence, Governance, Digital Human Rights, United Nations, Global Digital Compact, Artificial Intelligence Act

Biography

Former director of Institute of International Law and International Relations and of the European Training and Research Centre for Human Rights and Democracy (ETC) of University of Graz; Lecturer at Vienna Diplomatic Academy, University of Ljubljana and at the European Master Programme on Democracy and Human Rights in Sarajevo; expert services for UN, Council of Europe and EU; OSCE rapporteur under the Moscow Mechanism on Chechnya (2018), Belarus (2020) and Ukraine (2022). Projects and publications on internet governance and the information society as well as on freedom of expression and the Internet (Freedom of

Expression and the Internet, Updated and revised 2nd edition, with Matthias C. Kettemann, Council of Europe Publishing 2020).

Fostering Fundamental Human Rights and Trustworthiness though the Utilization of Emerging Technologies: the AI4Gov Platform

George Manias; Spiros Borotis; Charalampos Chatzimallis; **Tanja Zdolsek Draksler; Alenka Gucek**; Fabiana Fournier; Andreas Karabetian; Dimitris Kotios; Matej Kovacic; Danai Kyrkou; Lior Limonad; Konstantinos Mavrogiorgos; Dimitris Ntalaperas; Xanthi S. Papageorgiou; Dimosthenis Kyriazis

Alenka Gucek
Jožef Stefan Institute, AI4GOV project group

Tanja Zdolsek Draksler
Jožef Stefan Institute, AI4GOV project group

The tremendous technological outbreaks that characterize our modern societies have evolved citizen behaviors and expectations for more responsive, trustworthy, and transparent public services and policies. In that direction, solutions, and application from the emerging domains of AI, Big Data and blockchain should safeguard the fundamental elements of human rights, as well as the respect for human dignity, freedom, equality, and democracy, and citizens should be protected from the negative impacts from the utilization of these technologies. In addition, the implementation of such solutions focusing on data-driven and evidence-based policy making purposes is associated with various challenges that have not been yet adequately addressed. These challenges encompass not just the development of these solutions, but also their integration and how their further interpretability and explainability to the policymakers and all stakeholders of the modern e-government landscape. Through this work we seek to unveil the potentials that pose from the introduction and implementation of the AI4Gov platform. It is a groundbreaking initiative designed to harness the synergies of AI, Big Data, and blockchain technologies in fostering the fundamental human rights. This innovative framework aims to leverage AI algorithms and advanced analytics to process vast amounts of data, identifying patterns and insights crucial for understanding and addressing bias and discrimination among other challenges. Moreover, the integration with blockchain ensures the immutability and transparency of data, providing a secure and decentralized platform for recording and verifying human rights-related information. Finally, the definition of the AI4Gov platform's architecture and the integration of its components follow some best principles proposed and introduced by the GAIA-X architecture, that represents a novel model for the architectural design of software and cloud systems following a federated approach. This initiative aims to ensure data sovereignty, interoperability, and trustworthiness for businesses and organizations.

Keywords: Trustworhiness, Emerging technologies, GAIA-X, AI, Big Data, Human Rights

Protecting Free Elections in the Age of Political Bots: Assessing the AI Act in the Context of the European Convention on Human Rights

Gizem Yardimci
PhD Student, ADVANCE CRT, Department of Law, Maynooth University (he National University of Ireland)

AI-enabled political bots play a significant role in shaping public opinion via social media and were employed for manipulative purposes during the electoral processes such as Brexit and the 2016 US election. The European Convention on Human Rights (the Convention) protects the right to free elections in terms of the choice of the legislature, extending this right to European Parliament elections and presidential elections with legislative powers. However, referenda and local elections are not covered according to the European Court of Human Rights (the Court). On the other hand, the Artificial Intelligence Act (AI Act) inadequately addresses this concern in terms of emerging technologies. The reason is that the AI Act provides a broad framework by regulating democratic processes such as elections and referenda. It adopts a risk-based approach that involves reducing risks, spreading risks, and transferring risks. Accordingly, AI systems intended to be used for influencing the results of electoral processes will be defined in the high-risk category. Therefore, the AI Act may lead to the reconsideration of the right to free elections as a living instrument which must be interpreted in the light of present day conditions and the revision of its principles and jurisprudence. This presentation will explore the general framework of the AI Act and the Convention in terms of regulating political bots through qualitative document analysis and the decisions of the Court and semi-structured interviews.

Keywords: Right to free elections, AI Act, elections, democracy, human rights

Biography

Gizem is a doctoral researcher in the Department of Law, Maynooth University, under the supervision of Dr. David Mangan and Professor Aphra Kerr. Her research interests are Artificial Intelligence Law, Data Protection, UAVs, and Human Rights. Gizem holds a bachelor's degree in Law from Marmara University and a master's degree in Human Rights from Ankara University, Turkey. Besides academic studies, she worked for the Ministry of Transport and Infrastructure, the Republic of Turkey as an aviation expert for six years. In addition, she has been a member of the Ankara Bar Association as a lawyer since 2014.

AI4GOV's Holistic Regulatory Framework: Empowering Democracy by Fostering Citizens' Trust and Participation with Artificial Intelligence

Georgia Panagiotidou
Adjunct Faculty member, Aristotle University of Thessaloniki and Hellenic Open University

In an era where trust in political institutions is waning and participatory democracy faces numerous challenges, AI4GOV project is developing a holistic regulatory framework tailored for AI integration, proposing a comprehensive approach to embedding AI tools within the processes of governance. These tools are designed to enhance transparency, accountability, and inclusivity, thereby fostering a more participatory character of democracy. The development of AI-driven platforms that facilitate more meaningful interactions between citizens and their governments and provide personalized information and services, empowering citizens to actively participate in decision-making processes. Moreover, the AI4GOV HRF addresses potential risks and ethical considerations associated with AI deployment in the public sector. By establishing clear guidelines and governance structures, we ensure that AI technologies serve the public interest, safeguarding against biases and ensuring data privacy and security. Our preliminary findings, following a combination of Delphi methodology and SWOT analysis suggest that AI4GOV tools can significantly enhance the participatory character of democracy, rebuilding trust between citizens and their political institutions. As we continue to refine these tools and frameworks, we invite collaboration and dialogue with stakeholders across the spectrum to realize the full potential of AI in governance.

Keywords: Artificial Intelligence; Democracy; Participation; Bias mitigation

PANEL 4 AI AND EDUCATION

AI + Education: a new 'Diamond Age' or a threat to rights and values?

Rob Chalmers
Senior Lecturer, College of Business, Government and Law, Flinders University

This presentation takes the form of a provocation to stimulate thinking and debate, inspired by Neal Stephenson's 1995 speculative fiction 'The Diamond Age'. That novel included a portrayal of a sophisticated and responsive interactive tutor (Young Lady's Illustrated Primer) which combined an AI system with a human actor. The tutor was initially developed for a privileged upper class, then illicitly made more broadly available. What was fiction is now fact, with traces of these ideas visible in current uses of AI in education. These include the use of AI to "reskin" full motion video to fit the avatars of different people (or even render video from text only inputs). Generative AI tools allow the creation of seemingly naturalistic responses from artificial tutors, and can be readily reprogrammed to play different roles in different fields with simple narrative prompts (akin to the suggestions that might be made to actors workshopping a play). What are the implications for educational access and quality, academic integrity, democracy, privacy, security, and values? What about the personal and human rights of those creating educational tools and materials – including rights to the future use of their likenesses and moral as well as economic rights in their creations (imagine an educational version of Writers Guild of America v Alliance of Motion Picture and Television Producers)? What are the consequences for professional standards and will future professionals – in the law and other fields – benefit or suffer from such approaches? Is it desirable or even possible to moderate these developments in the face of the accelerating pace of integration of AI into commonplace office, productivity and search tools? Finally, might we actually find effective responses to some of these challenges in older approaches to education and training?

Keywords: Artificial intelligence, Education, Professional standards, Academic integrity, Intellectual property, Privacy, Security

Biography

Rob is from Flinders University in Australia, where he is a Senior Lecturer and Course Coordinator of the post graduate Juris Doctor program. He has 3 decades of experience in innovation, having worked for Defence, research agencies, Universities and companies across a range of fields including AI and information security. He teaches topics in Legal Innovation, Intellectual Property, Technology Regulation and Contract. His research focus is at the interface between law, technology and society, and he has recently contributed to enquiries into the future regulation of AI by the Australian Human Rights Commission and Federal and

State governments. He is interested in the potential of AI agents to enhance learning.

How AI is Redefining Educational Paradigms

Paulius Pakutinskas

UNESCO Chair on AI, Emerging Technologies and Innovations for Society, full Professor at Mykolas Romeris University (MRU) (Vilnius, Lithuania)

The integration of Artificial Intelligence (AI) into education redefines traditional paradigms by blending technological advancements with pedagogical methods. This presentation examines AI's impact on education, highlighting its benefits and risks, especially within the EU Artificial Intelligence Act's framework, which classifies certain educational technologies as high-risk.AI facilitates personalized learning, meeting diverse student needs and learning paces. This enhances engagement, outcomes, and enables adaptive learning systems to adjust educational content. AI also automates tasks like grading and feedback, allowing educators to focus on qualitative instruction. In curriculum development, AI analyzes educational data to identify learning gaps and recommend improvements. AI-enhanced virtual environments offer interactive platforms, simulate real-world scenarios, and broaden access, fostering inclusivity. However, AI in education presents challenges. Classification of some AI applications as high-risk underscores the need for rigorous safety, transparency, and accountability standards. Ethical issues, such as data privacy, surveillance, and algorithmic biases, demand stringent regulatory frameworks. The adoption of AI reshapes educators' roles, requiring new skills and changing the educational employment landscape. While AI can reduce disparities, it risks widening them in regions lacking the infrastructure for sophisticated technologies. AI revolutionizes education by offering personalized, efficient, and inclusive experiences. Nonetheless, it poses challenges to regulatory and ethical frameworks, requiring careful approaches to maximize benefits while minimizing risks.

Keywords: AI in Education, High-Risk AI Technologies, EU Artificial Intelligence Regulation, Adaptive Learning, AI Ethical Concerns

Prof. Dr. Paulius Pakutinskas, UNESCO Chair on AI, Emerging Technologies and Innovations for Society. A full Professor at Mykolas Romeris University (MRU) (Vilnius, Lithuania). He is Head of Legal Tech Centre. Professor is Director of Legal Tech LL.M and Law, Technology & Business Master degree programmes at MRU. He is a Board member of Artificial Intelligence Association of Lithuania and works extensively on ethical and regulatory issues related to AI, including in the medical and military fields. He has studied, interned and lectured at the Norwegian School of Management BI (Norway), University of Cambridge (UK), Tel Aviv University (Israel), Kanagawa University (Japan), Re: Humanize Institute (Denmark), Singularity University (Denmark), Vilnius University, Faculty of Law (Lithuania), International School of Management (Lithuania). He is experienced Senior Legal Executive with a demonstrated history of working in the telecommunications industry. He has a very strong legal professional background with a Doctor of Philosophy (Ph.D.) focused in Technology & Business and is a top

professor at MRU. All his Interdisciplinary research, projects, and publications are related to an interrelation of Law, Business, Emerging Technologies and Innovations, including in the field of AI, ICT, New Technologies, Cyber Security, harmful content on the internet, etc. Professor, together with Lithuanian laser and biotechnology scientists, founded Vital3D Technologies - high-tech startup working with cutting edge technologies in lasers/materials/biotech/AI to develop advanced 3D tools for the future of personalized medicine. He is a Board Member of Vital3D Technologies.

Ensuring Human Rights in the Age of AI-Powered Education

Kannan Hemachandran
Director - AI Research Centre & Associate Dean, School of Business, Woxsen University, Hyderabad, India

In an age where AI is reshaping education, my presentation, "Ensuring Human Rights in the Age of AI-Powered Education," reflects on the practical intersections of AI technology and educational equity. Drawing from real case scenarios, we'll explore the potential of AI to broaden access to quality education, echoing our chatbot project, which aids law school students in practicing case studies. Yet, ethical considerations loom large, reminiscent of our AI Policy Task Force, which partners with schools and colleges, implementing our rigorous policy standards. Together, we'll navigate the dynamic landscape of AI in education, applying lessons from our Data-Driven Justice Initiative to advocate for regulatory safeguards and responsible AI deployment that upholds fundamental human rights in the digital era.

Keywords: Human Rights, AI-Powered Education, Equity, Ethical AI, Educational Technology

Biography

Dr Hemachandran Kannan is the Director of the AI Research Centre, Associate Dean of the School of Business, and Area Chair of the Analytics Department at Woxsen University. He is an ambassador of the AI Accelerator Institute and an Advisory Board member in many international and national companies such as AptAI Labs, USA, Agzitence Pvt, Ltd, and many more. He served as an effective resource person at various national and international scientific conferences and also gave lectures on topics related to Artificial Intelligence. Currently serving as Expert at UNESCO and ATL Mentor of Change. He has edited 7 books and authored 3 books. He was bestowed as Best University Faculty Award at Woxsen University for two consecutive years 2022-2023 and 2021-2022 and also at Ashoka Institute of Engineering & Technology in 2019 – 2020. He is an expert in Natural Language Processing, Computer Vision, Building Video recommendation systems, and Autonomous Robots. He is working on various real-time use cases and projects in collaboration with Industries across the globe.

Challenges in the Development and Use of AI in Education

Sandra Fabijanić Gagro
University of Rijeka, Faculty of Law, Croatia

The right to education is a fundamental human right and a prerequisite for civilizational achievements. Although a basic knowledge of reading, writing and arithmetic is a prerequisite for quality education, more than 760 million people worldwide are illiterate. On the other hand, the world is also facing rapid digitalization and technological development; humanity is increasingly connected to AI in many areas of daily life, including education. It is therefore necessary to promote and support the development of AI skills at both national and international levels. However, this is easier said than done. The fundamental problems are related to the lack of preparation of education systems for AI. Some of them are outdated and do not adapt effectively enough to the requirements of new technologies. Currently, there are relatively few international education initiatives focused on AI, such as those promoted by UNCESCO. Recent information shows that out of 450 schools and universities that responded to a global survey, less than 10% have developed any kind of institutional policy or formal guidelines for the use of AI. AI literacy, however, requires everyone to achieve a certain level of knowledge and skills related to the equitable, inclusive, ethical and transparent use of AI. This is the competency that is likely to become very important in the coming years. This presentation will therefore focus on international efforts to promote AI in education and the challenges for its deployment, i.e. the (in)ability of education systems worldwide to adapt to the rapid development of AI and to prepare not only the future generation but also the current one for the AI era in general. Investment in AI education could become one of the future priorities, accompanied by the awareness that more efforts are needed to fully integrate the new competencies into national education systems.

Keywords: Education; AI; AI literacy; UNESCO; Qingdao Declaration (2015); Beijing Consensus on AI and Education (2019)

Biography

Sandra Fabijanić Gagro is currently a Full Professor at the University of Rijeka, Faculty of Law, Department of International Law, teaching courses in international law, international humanitarian law, International Law of the Sea, and diplomatic and consular law. However, her main academic and research interests are various aspects of international humanitarian law, especially international criminal law and human rights. She has published numerous articles in internationally recognised publications and conference proceedings and has participated as a lecturer in many international academic conferences, summer schools and courses.

PANEL 5 AI AND PRIVACY

AI-Powered Emotion Recognition: Human Rights Challenges and Implications

Silvia De Conca
Assistant Professor in Law and Technology, Amsterdam law & Technology Insitute (ALTI), Vrije University Amsterdam

This article explores how emotion recognition technologies challenge the protection of human rights and fundamental freedoms. Emotion recognition consists of using AI techniques to infer human emotional states from facial (micro) expressions, muscle movements, speech, or audio signals. The applications of emotion recognition range from commercial (driver fatigue detection, profiling for personalization in smart environments, targeted advertising, political campaigning, movie rating, etc) to state surveillance (lie detection in airports, fraud detection, public security, anti-terrorism, crime prevention). While AI experts continue investigating the potential of emotion detection, psychologists and sociologists are divided, with experts warning against it, highlighting the lack of scientific consensus on the very definition of emotion, and the pollution created by pseudo-sciences on the matter. The contribution of this article is twofold. It outlines the characteristics of AI-powered emotion recognition that challenge the dignity and autonomy of individuals and groups. It then explores the implications of emotion recognition vis-à-vis specific provisions of the European Convention for Human Rights, looking in particular at the right to private life, freedom of religion and thought.

Biography

Silvia De Conca is Assistant Professor in Law & Technology at the Transnational Legal Studies department of the Vrije Universiteit Amsterdam. She is the co-chair of the Human Rights in the Digital Age group, within the Netherlands Network for Human Rights Research (NNHRR) and a board member of the Amsterdam Law & Technology Institute (ALTI). Silvia holds a PhD from Tilburg University (NL), as well as a Masters' degree in Technology law from LSE (U.K.), a Masters' degree summa cum laude in comparative and international law, and a bachelor's degree in law, both from Roma Tre University (IT). Silvia's research focuses on the legal implications of manipulative design, but also on issues concerning privacy, the regulation of AI, smart home and IoT, and more in general technology.

Can AI Driven Technologies Become the New Trigger for Postmortem Privacy Protection?

Elwira Macierzyńska-Franaszczyk
Assistant Professor, Kozminski University Warsaw Poland

Technological development enabled each natural person to create and circulate enormous amount of personal information in a digital environment. Personal data, photographs, texts, voice, feelings, reactions are shared within digital environment of social media platforms or internet services providers. The phenomenon of digitalization of our privacy serves as a driving force for data markets and AI driven technologies. Sophisticated AI driven applications using personal information related to a selected individual allow to mimic a specific person, alive or deceased. The persistence of personal information in digitalised environment and its utility for AI driven technologies creates a challenge for privacy protection on a general scale. In 2021 The Independent shared an information regarding a controversial patent granted to Microsoft company, that would allow it to create a chatbot using personal information of deceased people to reincarnate them digitally. The current legal challenges caused by deepfake technologies are addressed to privacy infringing processing of personal information, not to mention identity theft. As AI driven applications impact human rights, including right to respect one's privacy, a need to ground AI developments in human rights standards and articulating a private sector responsibility to respect human rights causes constant concerns. The concept to respect for private and family life is expressed under Article 8 ECHR. Under this provision a state has not only a duty not to interfere into the privacy, beside strictly limited exceptions, but also an obligation to ensure an effective protection of privacy. The right to protect privacy under Article 8 ECHR is interpreted broadly and in line with a changing reality. According to the evolutionary interpretation "the Convention [ECHR] is a living instrument", protecting living entities. Also, the protection of personal data or personal information are focused on protection of living person. The idea to expand the privacy protection after the person death is still disputable, particularly within civil law systems. Referring to the presented phenomena the author will consider (1) the purposefulness of shaping the construct of post-mortem privacy, (2) the arguments for and against granting the protection to the privacy of a deceased person, (3) applicability of existing legislative instruments for the purpose to protect privacy post-mortem, (4) possible legislative solutions sealing the privacy protection in the EU legal environment.

Keywords: Privacy protection, right to privacy, AI, ECHR, Article 8

Biography

Elwira Macierzyńska-Franaszczyk - PhD in Law, MBA; Lawyer, Assistant Professor at the Civil Law Department, Kozminski University in Warsaw; Research Assistant European Legal Studies Institute, University of Osnabrück. Former member of the working group on Service

Contracts of the Codification Commission on Civil Law at the Polish Ministry of Justice; member of the European Law Institute, Wien. Specialised in Polish and European private law, consumer and e-commerce law, law of new technologies and private international law. Author of numerous publications (law).

AI in the United Nations Peacekeeping Operations and Identification of Risks to the Right to Privacy

Andraž A. Melanšek
PhD student, University of Ljubljana

Technological advancements in data exploitation, digitization, and artificial intelligence played a pivotal role in 2023 UN Peacekeeping Ministerial in Accra, Ghana. They offer hope and novel opportunities to improve peacekeeping mandate delivery in fast-paced, precarious security conditions in some of the world's poorest countries. To that end, the Secretary General of the United Nations promulgated Strategies on New Technologies and Data, providing a framework for the UN to independently harness the potential of AI. These strategies seek to optimize AI as an enabler, fostering an analysis-driven understanding of conflict environments. Practical applications of AI in peacekeeping range from analytical to operational and evaluative. Opportunities have been identified in areas such as conflict analysis and prediction, physical safety and security of peacekeepers and populations at risk, optimization of operational support, targeting of humanitarian assistance and disaster response, and countering disinformation and information warfare. However, opportunities come, among others, with legal risks to the right to privacy, compounded by the inherent nature of AI (e.g., machine learning, pattern recognition, adaptation to new information, language models) and systemic realities of United Nations peacekeeping (e.g., multinational staff, delegated authority with ex post facto oversight, challenging security environments). Potential risks to the right to privacy from using AI in peacekeeping include legal concerns related to data misuse and unauthorized access, discriminatory biases in AI algorithms, insufficient transparency in AI decision-making processes, and data security vulnerabilities potentially allowing unauthorized access and disclosure. These risks may violate privacy principles under international human rights instruments, infringe on the right to information, and violate the right to non-discrimination. The use of AI in the UN peacekeeping operations is a welcome opportunity, which should be embraced. However, it must be weighed against ethical and legal challenges it poses by protecting the right to privacy through clear standards, appropriate risk-management strategies, training, and independent oversight.

Keywords: United Nations peacekeeping, United Nations Strategy on New Technologies, right to privacy, conflict environment, legal challenges, risk-management

Biography

Andraž Melanšek graduated from the Faculty of Social Sciences in Ljubljana in 2006 and a year later obtained a Master's degree in International Relations from the University of Cambridge. He has received several awards from the faculty and the university for his academic work in Slovenia. From 2010 until the end of 2023, he was a full-time employee of the UN Secretariat, one of the six Slovenians who passed the admission tests. During his career, he has served in Vienna, Haiti and Kosovo, as well as in New York, Afghanistan, Iraq and Mali. In addition to the UN, he has worked for A.T. Kearney, the EU, OSCE, IOM (International Organization for Migrations), IFES (International Foundation of Electoral

Systems) and The Economist Intelligence Unit. On his return to Slovenia, he served at the Ministry of Justice as Chief of Staff to the Minister. He is currently in the second year of his PhD studies in Humanities and Social Sciences at the University of Ljubljana, where he is studying the impact of the implementation of norms on their survival, using the example of UN peacekeeping operations.

International Humanitarian Organizations and the Use of AI: Identifying the Applicable Data Protection Legal Regime and Assessing the Role of the Individual Consent

Maruša T. Veber
Assistant Professor and Researcher, Faculty of Law, University of Ljubljana

Humanitarian assistance is increasingly being carried out by relying on digital information technologies, including artificial intelligence (AI). AI systems, which typically draw on large amounts of data, including biometric data of aid recipients, significantly improve the accuracy and effectiveness of aid delivery and help to prevent possible misuse of humanitarian aid. By conditioning the distribution of aid on the use of AI and biometric data, the organizations aim to ensure that the assistance provided goes to the hands of those in need, preventing the aid from being diverted and used for other purposes. However, on the other hand, the use of AI in this context opens manifold important questions relating to data protection and the right to privacy of the concerned individuals. It is questionable whether the use of AI systems is compatible with existing data protection legal frameworks and the underlying data protection fundamental principles (lawfulness, fairness and transparency; purpose limitation; data minimisation) requiring *inter alia* appropriate legal basis for the processing of personal data such as informed consent of concerned individuals. This discussion is particularly topical in the context of humanitarian international organizations, as it is not settled in international law to what extent are these organizations bound by relevant international, regional and national data protection provisions. The aim of this paper is twofold. First, it aims to clarify the application of data protection regimes to international organizations. It is argued, that due to the immunities of international organizations, the most relevant are the internal institutional regimes of concerned international organizations concerning data protection. Second, this paper aims to analyse the role that the consent of concerned individuals has in these internal data protection policies and in practice of these organizations when delivering humanitarian aid in man-made and natural disasters.

Keywords: humanitarian assistance, artificial intelligence, data protection, immunities, consent

Biography

Maruša T. Veber is an Assistant Professor and Research Associate at the Faculty of Law of the University of Ljubljana. Previously she was a junior visiting fellow at the Graduate Institute of International and Development Studies in Geneva (Switzerland), a visiting scholar at the University of Hull Law School (United Kingdom) and a researcher at the United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS) in Bruges (Belgium). She is a rapporteur at the Oxford International Organizations database and is a member of the editorial board of the Ljubljana Law Review (LLR). Her research interests include international institutional law, responsibility of states and international organizations,

human rights and artificial intelligence, sanctions in international law and intersections between international and European Union law. In the past she was awarded for her work by the United Nations Association of Slovenia (2014, 2022), the Association of Slovenian Jurists' Societies (the Award for Young Jurist of the Year 2023) and the Faculty of Law of the University of Ljubljana (2024).

PANEL 6 AI AND THE RIGHTS OF WOMEN AND CHILDREN

ICT-facilitated Violence Against Women as a Violation of Human Rights: Perspectives from Europe

Sara De Vido
Associate Professor of international law, Ca' Foscari University Venice, Italy

The purpose of this presentation is to provide a definition of ICT-facilitated violence against women according to international and regional legal instruments – including the landmark Council of Europe Istanbul Convention – and to consider it as an "umbrella notion" under which several illicit behaviours can be brought to. The phenomenon will be described as a violation of fundamental human rights and will be located in a continuum of violence (online-offline). The gendered nature of ICT-facilitated violence will be specifically addressed. Through the example of deep fake, the presentation will also delve into the challenge to subjectivity posed by artificial intelligence in a feminist perspective. A part of the analysis will be devoted to access to reproductive services and how technology can, on the one hand, support women, and, on the other hand, disadvantage women through mechanisms of disinformation and misinformation, causing violence against women's health. Intersectionality will be a cross-cutting issue. The presentation will then critically discuss the (proposal for) a Directive on countering violence against women and domestic violence as a legal instrument that, by implementing the Istanbul Convention which is silent on the issue (except for the first GREVIO general recommendation), harmonises the elements of certain crimes falling under the umbrella notion. The analysis will unfold a complex coordination among EU legal instruments, including the DSA and the Directive on non-contractual civil liability rules on artificial intelligence. It will then reflect on the importance of the European action, highlighting at the same time the risks for its implementation in EU member states that have shown great reluctance with regard to the concept of gender.

Keywords: Violence against women, ICT-faciliated violence, Istanbul Convention

Biography

Sara De Vido is associate professor of international and EU law at Ca' Foscari University of Venice, Italy, and affiliate to the Manchester International Law Centre, UK. She is delegate of the Rector for Gender Equality. As a scholar, Sara De Vido has extensively written on topics related to human rights, in particular on women's rights and countering gender-based violence against women in international and EU law. She is the co-editor (along with Micaela Frulli) of the first commentary to the Istanbul Convention (2023, Elgar Publishing). She has been invited as a legal expert by the Council of Europe, the European Commission, and NGOs at European level. She is the legal expert (2023-2024) for the EU network on preventing gender-based violence and domestic violence, established by the European Commission.

The Impact of AI on Children in Armed Conflict: A Dual-edged Sword

Laura Guercio
University of Rome Niccolo' Cusano

The integration of Artificial Intelligence (AI) into contemporary armed conflicts presents a multifaceted influence on children, both positive and negative, considering advancements in technology as a double-edged sword. On the positive side, AI has the potential to ameliorate the impact of armed conflicts on children by enhancing humanitarian efforts. AI-driven technologies enable more efficient delivery of aid, medical services, and education to conflict-affected areas. Drones equipped with AI can be employed for rapid and accurate assessment of humanitarian needs, facilitating timely and targeted assistance. Additionally, AI-powered educational tools can provide displaced children with access to learning opportunities, mitigating the disruption caused by conflict to their academic development. Conversely, the negative repercussions of AI in armed conflict on children are alarming. Autonomous weapons, driven by AI, pose a significant threat to the safety and well-being of children as they can be deployed without human intervention. The indiscriminate nature of such weapons raises concerns about civilian casualties, including children, exacerbating the humanitarian crisis. Moreover, the use of AI in surveillance and cyber warfare can infringe upon children's privacy, leading to psychological distress and trauma. Furthermore, the growing reliance on AI in recruitment strategies by armed groups exposes children to increased risks of exploitation and manipulation. AI algorithms can be utilized to identify vulnerable individuals, making children more susceptible to recruitment efforts. This raises ethical concerns surrounding the use of technology in exacerbating the already dire situation for children affected by armed conflict. The impact of AI on children in armed conflict is therefore a complex interplay of positive and negative consequences. Striking a balance between harnessing the benefits of AI for positive change and mitigating its potential harms is imperative to safeguard the most vulnerable members of society amidst the challenges of armed conflict.

Keywords: Armed conflict, artificial intelligence, children, humanitarian needs, manipulation, education

Biography

Laura Guercio teaches International relations and intelligence systems at the University of Rome Niccolo Cusano. She is SG of the Universities Network for Children in Armed Conflict. She is a Member of the Executive Committee of the European Law Institute

The Use of AI in the Process of Restoring Children's Rights

Olena Krytska
External relations officer, Organization "Right Decision"

A lot of Ukrainian children, who were forcibly transferred and then returned, don`t want to communicate with psychologists because of serious psychological traumas caused by crimes committed against them during the war. This urges alternative ways of establishing a trusting relationship with a child discovering his/her concrete problem and identifying an efficient solution to it. The majority of forcibly transferred children lost the right to a nationality, precisely – to choose a nationality. Another right violated during forcibly transferring children within the context of the Russo-Ukrainian war is the right to freedom of thought. Therefore, the physical return of children is not a final point – a lot of work at the mental level remains after this. The AI should be developed in a way to minimize the necessity of involving a person in the process of communication with a child as much as possible until a child feels comfortable with such communication. A lot of questions should be taken into consideration while working on this project, for example – the form of embodiment of AI and the possibility of creating strong AI that is able to self-regulate itself. Depending on this the stages of engaging psychologists should be identified – if the creation of strong AI is possible, psychologists can be involved only at the beginning of the process – the development of the communication strategy, after which AI would be able to assess the situation on its own and change tactics of further communication with a child if it is needed. If it is impossible, then psychologists should be engaged in all the steps of communication with children to regulate and correct further strategy of the communication. But here is a challenge to organize such participation in remote form, with AI as an intermediary.

Keywords: artificial intelligence (AI), human rights, helping children, psychological rehabilitation, the right to a nationality, the right to freedom of thought

Biography

Olena Krytska: a graduate of law faculties of the National University of Kyiv-Mohyla Academy (master's degree) and Taras Shevchenko National University of Kyiv (bachelor`s degree); a co-founder of and External relations officer in the organization “Right Decision” whose aim is to introduce artificial intelligence into the process of support of children in addressing stress; a Main specialist of the Division of legal cooperation with international organizations of the Office of legal cooperation with international organizations of the Department of international cooperation and representation of the Ministry of Justice of Ukraine; a volunteer in the managing unit of the German –Southeast Asian Center of Excellence for Public Policy and Good Governance (CPG) (11 September 2023 - 24 January 2024); a junior researcher of the Universities Network for Children in Armed Conflict (01 June - 20 November 2023); a project coordinator in CSO "Transparency International Ukraine" (03 October 2022 - 31 March 2023).

AI and Children's Right to Privacy

Mia Swart
Visiting Professor, School of Law, University of Witwatersrand

Because of the exponential growth and advancement of artificial intelligence-related technologies over recent years, the current international framework that protects children's rights does not address many of the issues raised by the development and use of artificial intelligence. Children's constant exposure to AI through social media and internet consumption means that AI has enormous rights-depriving potential for children. UNICEF's definition of children's wellbeing focuses on children's health and safety, their material security, their education and socialisation, and their sense of being loved, valid and included in the families and societies in which they are born.' In my paper I will focus on the ways in which children can be protected from being deprived of privacy through the operation of artificial intelligence. I will consider ways in which children can be protected from exploitation associated with information gathering without a child or parent's consent. How can systems be developed to prevent the personal data gathered by AI from being used against a child's interests? I will further argue that children's AI-related rights are particularly important in peacetime because of the way in which 'war' is defined. Since many children find themselves in contexts of instability and conflict which might fall short of 'war' this branch of the law is increasingly important. Children in contexts of instability have heightened vulnerability to the negative impacts of AI.

Keywords: children, privacy, personal data, artificial intelligence, peacetime

Biography

Mia Swart is a Visiting Professor at the University of the Witwatersrand. She formerly worked as Professor at the University of Johannesburg and Associate Professor at the University of the Witwatersrand in Johannesburg, She is also a former producer at Al Jazeera Media Network. She writes on international criminal law, transitional justice and human rights law. She has consulted for UNDP in Palestine and Amnesty International in Southern Africa. She is Editor in Chief of the African Yearbook of International Humanitarian Law.

AI, Children's Rights and Future Generations

Maria Bertel
Institut für Öffentliches Recht und Politikwissenschaft | Institute of Public Law and Political Science, Universität Graz | University of Graz

The rights of future generations are already being discussed in the context of climate change, and it is argued that future generations should not be overburdened. Therefore, current generations should limit their actions to ensure the livelihoods of future generations. However, the idea of not overburdening future generations can also be applied to AI: AI applications will have an impact on future generations, and we can expect their role to increase. This can be illustrated by the so-called "de-skilling", which was also recently highlighted by the German Ethics Council. De-skilling is the process of losing certain skills, and it can happen when AI applications take over tasks that were previously done by humans. Such skills can be quite trivial, such as the inability to write by hand, but also much more far-reaching, such as the loss of basic skills like understanding text, doing simple calculations or talking to each other. So far, the risk of de-skilling has been seen mainly in terms of the inability to maintain technical processes in emergency situations, such as a blackout, but I will look at de-skilling over time in relation to the basic skills that I believe are necessary for a democratic society. In line with General Comment No. 25 (2021) on the rights of the child in relation to the digital environment, I will assume that AI could affect very young children more than older children. With this in mind, I will explore whether we can derive a duty to prohibit AI that leads to the deprivation of (young) children's basic skills needed to participate in democratic processes, and in what respect children's rights require "AI-free zones", not only for the development of the individual child, but also for the development of society (and future generations) as a whole.

Keywords: Children, AI, future generations, de-skilling, democracy

Biography

Maria Bertel has been a full professor of public law and digitalisation at the University of Graz since October 2023. Previously she held a position as a full professor of public law with a focus on administrative law at the same institute. During her previous work as a research assistant (prae and post doc) at the University of Innsbruck, she received several awards for her research activities, including for her habilitation thesis, which she wrote on ‘The Efficiency Principle of the Austrian Federal Constitution’. For her habilitation project, Maria Bertel was furthermore awarded a four-year Elise-Richter-Fellowship of the Austrian Science Fund FWF. Besides, Maria Bertel has been a research fellow at Central European University in Budapest (April 2018 until April 2019). Maria Bertel has published articles and book chapters on the topic of (amongst others) democracy, administrative jurisdiction as well as environmental law

and recently digitalisation. Her research focuses on digitalization, public law and sustainability.

PANEL 7 AI, FAIR TRIAL, RIGHT TO EFFECTIVE REMEDY AND ACCESS TO JUSTICE

Initial Reflections on a (Potential) "Human Right to a Human Decision"

Michael Lysander Fremuth
University of Vienna, Faculty of Law, and Ludwig Boltzmann Institute of Fundamental and Human Rights

One of the pertinent issues deserving of attention is also growing understanding and recognition of a "(human) right to a human decision" in the context of protection against risks posed by artificial intelligence (AI). AI decision support systems are increasingly becoming part of decision-making processes in various areas of society, such as government services, law enforcement, finance and criminal justice. At the same time, serious concerns remain about their transparency, accountability and potential bias. It is recognized that AI can serve human rights, but at the same time it poses new and particularly serious risks. In recent years, there has accordingly been a growing willingness to regulate AI, most recently through a Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law adopted on May 17, 2024. Only in rare cases is the right to a human decision explicitly enshrined in law. It is, nevertheless, more and more frequently required in non-legally binding documents. I will briefly discuss whether and how such a right can be justified by the interpretation of specific norms or as a general requirement based on human rights considerations. In doing so, I aim to contribute to the ongoing discourse on the legal and ethical governance of AI and to ensure that human rights, values and agency are at the centre in a technologically driven world. Follow-up questions, among others, will be: What defines a "human decision" in the age of AI? When is a human decision required by human rights law? How to balance the benefits of AI-driven efficiency with the need for human oversight and judgement? What challenges can be foreseen in implementing this right in real-world contexts?

Keywords: human decision, artificial intelligence, human rights law, human oversight, decision-making processes

Fair Trial Implications of Algorithmic Justice

Aleš Završnik
Senior Research Fellow, Institute of Criminology at the Faculty of Law, Ljubljana, Director

The automation brought by big data analytics, machine learning and artificial intelligence systems has been introduced to replace humans in the banking, insurance, education, and employment sectors and it challenges us to reconsider the fundamental questions of criminal justice too. The use of AI in criminal justice potentially affects several criminal procedure rights: the presumption of innocence; the right to a fair trial (including the equality of arms in judicial proceedings, the right to cross-examine witnesses); the right to an independent and impartial tribunal (including the right to a randomly selected judge); the principle of non-discrimination and equality; and the principle of legality, and blurs the existing standards of proof. The presentation will outline automation in criminal justice and analyse encounters between AI systems and the law through an analysis of the case law and policy recommendations adopted at the European level.

Keywords: Automation, AI, fair trial, criminal justice, the equality of arms, the right to cross-examine witnesses, the right to an independent and impartial tribunal

Biography

Dr. Aleš Završnik is a Director of the Institute of Criminology at the Faculty of Law in Ljubljana and a Regular Professor at the Faculty of Law University of Ljubljana (Slovenia). His research interest lies in the intersection of law, crime, technology, and fundamental rights. He led several research projects funded by the Slovenian National Research Agency, such as research project "Automated Justice: Social, Ethical and Legal Implications" (Slovenian Research Agency, no. J5-9347) and "Human Rights and Regulation of Trustworthy Artificial Intelligence" (Slovenian Research Agency and several Ministries, no. V5-1930). His scientific article "Algorithmic justice: Algorithms and big data in criminal justice settings." (European Journal of Criminology, 18(5), 623-642) was awarded the Best Article of the Year by the European Society of Criminology. He organised several conferences in these research areas, e.g. one of the first was "Big data: Challenges for Law and Ethics" (Ljubljana, 2017), and collaborated with the European Commission for the Efficiency of Justice (CEPEJ) on the preparation of the "Ethical Charter on the Use of Artificial Intelligence in Judicial Systems" (2018).

Trust or Distrust in AI as an Independent Court: Lessons of the Global Pandemic to be Learned

Nóra Chronowski
Research professor, HUN-REN Centre for Social Sciences, Institute for Legal Studies

Boldizsár Szentgáli-Tóth
Senior research fellow, HUN-REN Centre for Social Sciences, Institute for Legal Studies

The recent documents and case law for the protection of fundamental rights outline two main aspects of right to fair trial: the right to fair judicial and administrative procedures. AI sets new challenges for these rights from several perspectives. On the one hand, it is dubious, whether an AI could be subject to the right to fair procedure, could AI demand legal protection, or could it be liable for its activities or omissions? The other challenge is the judicial work on the basis of AI, which means something more, than the online and digital court. AI could support the judicial decision-making process; could make certain decisions instead of the judge or the law enforcer; or it could help for the parties to estimate, whether it would be worthy to litigate. It is contestable, how these situations influence the prevalence of fundamental rights, especially the main elements of the right to fair judicial proceeding. Is the software judge a court established by the law? It could secure the impartiality and the independence better, when the judge decides with the help of algorithms, or the whole judgement is made by an algorithm without human contribution? Is the equality of arms concerned, when the judge and the prosecutor ground their decisions on AI? Would the judiciary comply more effectively with the deadlines, when the work would rely partly or completely on algorithms instead of human resources? Would be the judicial independence eroded, if the probable content of the judgement could be calculated by software? Could one determines in advance, on an abstract way, in the light of the characteristics and significance of the legal controversies, in what extent AI should be involved in the decision-making process? How could this influence the right to remedy? The presentation aims to reflect on these issues, through the dogmatic analysis of the right to fair judicial procedures and also taking into account practical experience as well as the emerging role of AI-based judicial technologies especially in the light of the Covid-19 pandemic, when the spread of virtual hearings entailed also constitutional/supreme court rulings dealing with the constitutional standards of AI-based judicial work.

Keywords: AI as an independent court, AI, Fair trial

Biography

Nóra Chronowski and Boldizsár Szentgáli-Tóth are Senior Research Fellows of the HUN-REN Centre for Social Sciences, Institute for Legal Studies (Budapest), while Bettina Bor works as a project researcher with the same affiliation. The three speakers are members of the National Laboratory of Artificial Intelligence in Hungary and have published several papers and given

conference presentations on the legal applicability of AI worldwide, both jointly and separately.

User-Generated Content and Deepfakes in International Criminal Proceedings

Konstantina Stavrou
University of Vienna, Ludwig Boltzmann Institute of Fundamental and Human Rights

'Photographs furnish evidence. Something we hear about, but doubt, seems proven when we're shown a photograph of it… [T]he camera record incriminates.', said photographer Susan Sontag. But is seeing indeed believing in international criminal proceedings, considering the rise of deepfakes? The presentation will focus on user-generated content and deepfakes in international criminal proceedings. First, some of the main risks related to the introduction of user-generated content as evidence in international criminal proceedings will be sketched out. The presentation will then emphasise, in particular, on the risk of deepfakes. Three categories of risks related to deepfakes will be discussed, namely (a) the absence of a legal workforce specifically trained in visual verification techniques; (b) the increasing sophistication and decreasing costs of deep learning technologies; and (c) an information ecosystem of mass distrust that may benefit those who seek to deny the veracity of real footage as deepfakes – also known as 'the liar's dividend', where people can seamlessly invoke that you cannot trust any footage that you see. Shifting the focus to the third category of risks, some examples of case law in which the 'liar's dividend' has already been raised will be provided. Finally, the presentation will touch upon aspects of admissibility and weight of user-generated evidence, including considerations on the rights of the defence.

Keywords: user-generated content, deepfakes, international criminal proceedings, ICC, evidence, admissibility, weight

Biography

Konstantina is a PhD candidate at the Law Faculty of the University of Vienna focusing on the use of user-generated evidence in international criminal proceedings, doctoral fellow of the Austrian Academy of Sciences, and Researcher in the programme 'Human Rights and International Criminal Law' at the Ludwig Boltzmann Institute of Fundamental and Human Rights in Vienna. In addition, Konstantina is a Lecturer at the University of Vienna in the postgraduate programme 'Human Rights'. Konstantina holds an undergraduate degree from Panteion University of Athens and an LL.M. in Public International Law from Utrecht University.

PANEL 8 AI, HUMAN RIGHTS AND ENVIRONMENT

AI and the Right to a Clean, Healthy and Sustainable Environment

Markus P. Beham
Professor, FU Berlin

Artificial intelligence (AI) carries the promise of contributing to the protection of the environment, allowing for the construction of large data models (biodiversity, climate weather ...), resource efficiency through monitored processes (energy and water use, light emissions, transport ...), and, potentially, further innovation. AI systems may allow for a more informed prediction of events and, in turn, the formulation of more effective mitigation strategies. Yet, should certain ethical considerations not be integrated into the design of the AI, tasking it with environment protection may result in unintended consequences if not an outright 'AI takeover' (the risk of which OpenAI's ChatGPT considers as 'theoretical', 'speculative', and 'extremely low'). The first step in the design of any such AI lies in the difficulties of defining the environment in any comprehensive fashion. In the 1996 Nuclear Weapons advisory opinion, the ICJ felt the need to clarify that 'the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn'. Thereby, the ICJ took a broad view, with a strongly anthropocentric focus, placing the individuals in the centre of the environment. Other definitions appear less clear on this. For example, Article 2(10) of the 1993 Lugano Convention defines the environment as including 'natural resources both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors; property which forms part of the cultural heritage; and the characteristic aspects of the landscape'. Difficulties arise wherever environmental considerations are linked to population growth. In line with the Club of Rome's 1972 Report 'The Limits to Growth', Principle 16 of the Stockholm Declaration suggests the application of 'demographic policies', albeit 'without prejudice to basic human rights' in order to manage 'the rate of population growth or excessive population concentrations' that may be 'likely to have adverse effects on the environment of the human environment'. Recommendation 12 of the Action Plan for the Human Environment even invites the World Health Organization (WHO) to 'promote and intensify research endeavour in the field of human reproduction, so that the serious consequences of population explosion on human environment can be prevented'. While the 1992 Rio Declaration substantially mellows down this wording, Principle 8 still speaks of the promotion of 'appropriate demographic policies'. The paper seeks to explore the necessary conceptual and legal boundaries imposed by the right to life on AI seeking to secure the environment. It suggests that the right to life implies an anthropocentric conception of the environment as in the right to a healthy environment but also incorporating liberal conceptions of human dignity and individual freedom in line with the philosophical foundations of John Locke and John Stuart Mill to prevent misled algorithmic results in balancing the right to life of present and future

generations. Furthermore, it argues that such an AI must structurally follow the precautionary principle to prevent the realisation of residual risks.

Keywords: AI, Right to a clean, healthy and sustainable environment, WHO, Rio Declaration, Lugano Convention, OpenAI, ChatGPT

Biography

Markus P. Beham is currently Visiting Professor at the University of Trier, Germany, and on leave from his position as Associate Professor at the Chair of Constitutional and Administrative Law, Public International Law, European and International Economic Law of the University of Passau, Germany. He holds a joint doctoral degree from the Université Paris Nanterre and the University of Vienna and a doctoral degree in history from the latter as well as an LL.M. degree from Columbia Law School in New York. Prior to returning to academia, Markus was part of the International Arbitration Group of Freshfields Bruckhaus Deringer LLP, resident in the firm's Vienna office. He continues to provide expert advice for private clients, law firms, NGOs, international organisations, and states on matters of international law, EU law, and arbitral procedure. He is included as arbitrator and trade and sustainable development (TSD) expert in the EU Commission's roster for bilateral disputes under trade agreements with third countries and has acted in cases before ICSID, ICC, DIS, and ad hoc tribunals as well as before the Austrian Supreme Court.

AI through EU and CoE Regulation in Relation to Right to Healthy Environment

Lucia Bakošova
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The international regulation of artificial intelligence (AI) significantly lags behind its technological progress. The current global regulation of AI takes the form of soft law. On the regional level, the European Union (EU) has adopted first legally binding framework regulating high-risk AI systems. The so-called AI Act could be the model regulation in this area. Apart from the EU, the Council of Europe (CoE) in 2023 introduced the proposed Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law, which would regulate all AI systems. Numerous legal aspects on the development and use of AI are addressed in the mentioned documents. One of the key aspect of the development and use of AI is its potential impact on internationally guaranteed human rights. The new developments in the international human rights law and international environment law forces States to take appropriate actions in relation to the newly recognised right to healthy environment. The aim of the study is to compare the newly adopted AI Act and the proposed Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law in relation to right to healthy environment. Particularly whether the mentioned documents require States and relevant stakeholders to take appropriate steps to ensure the right to healthy environment when developing and using AI systems. Apart from the analysis of mentioned documents, the author also analyses relevant EU and CoE instruments on human rights. The main focus is on the European Convention on Human Rights (ECHR) and proposed additional protocol to the ECHR on the right to healthy environment and relevant political documents of the CoE, such as the 2023 Reykjavík Declaration. Regarding the EU, the main focus is on the Charter of Fundamental Rights of the EU and non-binding documents adopted by the EU on the right to healthy environment.

Keywords: Artificial intelligence, European Union, Council of Europe, right to healthy environment, AI Act, Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law

Biography

Lucia Bakošová is currently a researcher at the Institute of International Law and European Law, Faculty of Law of Pavol Jozef Šafárik University in Košice, Slovakia. She received her doctoral degree in 2020 with the thesis “International aspects of natural and industrial disasters” at the Faculty of Law of Pavol Jozef Šafárik University in Košice. Since 2021, she is a member of a research team working on the project “Green Ambitions for Sustainable Development (European Green Deal from the

perspective of international and domestic law), with main focus on legal regulation of artificial intelligence related to sustainable development and international law. Furthermore, she teaches courses related to Public International Law and subject Law and Artificial Intelligence.

AI: A Tool For Improved Air Quality Management for Realization for a Right of a Clean, Healthy and Sustainable Environment

Shabnam Mahlawat
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AI, powered by complex data logic and machine learning algorithms, emerges as a game-changer in the contemporary world in accurately pinpointing the sources of pollutants, providing an intricate map of emission origins crucial for targeted correctional strategies. Its predictive modelling helped by complex neural networks and decision trees, integrating meteorological data and historical trends, stands as a beacon for improved decision-making, foreseeing air quality shifts and enabling policymakers to institute timely and evidence-based interventions. AI's capability to monitor and ensure regulatory compliance in real-time empowers regulatory bodies to swiftly identify deviations from environmental standards, triggering immediate alerts for corrective actions, thus reinforcing regulatory enforcement and preventive measures. The study sheds light on AI's contribution to urban planning through optimized traffic management and sustainable city development. By analyzing traffic flow patterns and recommending optimal routes, AI aids in reducing vehicular emissions, thereby curbing localized air pollution. Additionally, its insights inform urban planners, facilitating the design of sustainable urban spaces and green infrastructure to mitigate environmental impacts. AI-generated real-time pollution alerts and community engagement platforms serve as catalysts for informed decision-making and public participation. These platforms empower individuals with personalized recommendations, encouraging collective action in reducing carbon footprints and promoting sustainable practices. In essence, this paper underscores AI's transformative potential as a cornerstone in air quality management, advocating its utilization as a robust tool for evidence-based policymaking, proactive interventions, and public engagement towards a sustainable and healthier environment.

Keywords: Air Quality Management, AI, Right to a clean, healthy and sustainable environment

Environmental Rights and AI – Hinder or Help in Building Green Democracies?

Orsolya Johanna Sziebig
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Because of the pressing environmental challenges, there is a growing focus on environmental rights and green democracies. The latter does not have a universally accepted, clear definition. It is a global understanding that technological progress helps achieve environmental objectives and strengthen environmental rights. Given that a large proportion of humanity lives in urbanised environments, AI will help to develop green communities. On the other hand, AI can be affected by bias and other prejudices. Furthermore, AI is responsible for problems including carbon emissions, electronic waste, and potential harm to ecosystems. As more enterprises and institutions begin to use artificial intelligence, it is becoming evident that technology will deepen the climate crisis and the emission of GHG. Another issue is the learning ability of AI, which proved to be highly affected by society's general beliefs. An interesting question in the author's view is whether the destruction of the environment, which has been viewed with relative acceptance by humanity or the new environmental standards will be learned by artificial intelligence. In her presentation, the author wants to emphasise the connection between environmental rights, AI, green democracies and climate resilience. AI can boost public participation in decision-making and the right to a healthy environment. Hopefully, AI can help safeguard the right to water and the right to food in the future. But, AI's intrusive and discriminatory uses can harm people's health, fundamental rights or the environment. AI systems are used to influence voters and the outcome of elections and threaten green decisions. So, it is important to assess and mitigate possible AI risks to safeguard green transition and environmental rights and develop new regulations concerning AI.

Keywords: Right to a healthy environment; green democracy; environmental rights; artificial intelligence; climate resilience

Biography

Orsolya Johanna Sziebig is a senior lecturer at the Department of International and European Law, University of Szeged. She holds a PhD in Public International Law and an LLM in Environmental Law. She is responsible for university courses at all levels, including undergraduate, master's and higher research degrees. She provides advice and support to students individually and in research groups, allowing optimal academic results. She has great experience developing teaching materials at different levels, from small group seminars to large lectures. She has been a speaker at several conferences abroad Research interest:

ecocide, biodiversity protection, environment al rights, green democracies, transnational environmental crime.

PANEL 9 AI, MILITARY DOMAIN AND RESPECT OF HUMAN RIGHTS IN ARMED CONFLICT SITUATIONS

The Weaponization of AI: Implications for Human Dignity

Petra Perišić
University of Rijeka, Faculty of Law

Discussions on the permissibility of use of autonomous weapon systems often involve human dignity, as a right potentially threatened by such use. The central question underpinning these discussions is, however, not whether the use of those systems may encroach upon human dignity – because it certainly may – but whether human dignity is jeopardized more than it is when the force is used by humans. It has been voiced on number of occasions that leaving decisions of life and death of a human being to machines is the utter form of indignity. As machine lacks conscience and morality, it cannot understand the meaning of its actions or assess the appropriateness of its decisions. It has been asserted that only humans have the capacity to decide on the use of force, especially if it is potentially lethal, as machines can never be preprogrammed in such a way as to be able to predict all the possible real-life scenarios that may occur. On the other hand, humans are capable of committing crimes that are so heinous and detrimental to human dignity, that it is difficult to imagine how machines could ever demonstrate comparable brutality. The presentation focuses on assessing whether the use of autonomous weapon systems diminishes respect for human dignity and how different levels of autonomy of such systems and the (non)existence of meaningful human control influence that assessment.

Keywords: Autonomous weapon systems, human dignity, human rights, autonomy, meaningful human control

Biography

Petra Perišić is the associate professor of international law at the Faculty of Law, University of Rijeka. She teaches International Law, International Law of the Sea and The Law of International Organizations. Her main research interests are the law on the use of force, the law of the sea, succession of states, the law of migration, and others.

AI-DSS As a Lifesaver in Armed Conflict?

Mária Fančovičová
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The international community must urgently confront the new reality of warfare. The IHL is undoubtedly connected with the protection of human rights as human rights in times of armed conflict have to remain applicable under any circumstances. Recent debates revolve mainly around the risks of the AI revolution in military affairs. In contrast, there is much less information about using AI in the area of civilian and humanitarian protection. The paper therefore deals with the potential use of AI technologies as a tool for protection of civilians and victims of armed conflict, with an emphasis on machine learning-based decision-support systems (AI-DSS). These AI-DSS, due to the ability of widespread collection and analysis of data, are able to identify objects or protected symbols and they can be used for alerting the operator or the chain of command accordingly, a result of which will be better compliance with the principles codified by the IHL. The possible use of these systems is extremely broad, from decisions about who or what to attack and when, through decisions about who to detain and for how long, to making recommendations for military strategy or operations or predictions about future actions or situations. On the other hand, AI-DSS also have their system limitations. Although these systems do not make decisions, they directly and often significantly influence the decisions of humans which brings a lot of ethical and legal questions. In conclusion, AI-DSS can be a useful tool, but we should not replace the decision-making of humans by them.

Keywords: AI-DSS, Armed Conflict, AI

Biography

Author's research is dealing with the question of autonomous weapons systems [AWS] from the perspective of public international law, mainly the international humanitarian law. The author is focusing on the current legal framework regulating AWS and on future development of the AWS regulation. The author also deliberates ethical and security questions of AWS, and her research is not focused only on the ques5on of AWS itself, but she also analyses artificial intelligence [AI] as an integral part of AWS.

Biometric-driven Security: IHRL and Theories of "Emotional Dominance" in Military Deployments

Francesco Paolo Levantino
PhD Candidate in International and European Human Rights Law, Sant'Anna School of Advanced Studies (Pisa, Italy), DIRPOLIS Institute (Institute of Law, Politics, and Development)

Lessons learned from the military uses of Facial Recognition Technology (FRT) in the "War on Terror" have shown its role in achieving "identity dominance"; i.e. the denial of anonymity to gain tactical advantage and increase control in foreign territories. Today, further advancements in the field of biometrics allow for the identification or measurement of individuals' demeanours o reactions to various *stimuli*, claiming to provide insights into physical, mental, or emotional states. These tools could help protect armies from life-threatening hazards, thanks to enemy detection, tracking, as well as "threats prediction", well beyond conventional armed conflicts or the conduct of hostilities; they could prove their value also in deployments connected to peacekeeping/stabilisation or humanitarian aid missions. Such capabilities could help in labelling some situations or actors as "hostile/non-hostile", preventing misidentification of civilians as threats. From this perspective, the adoption of emotion recognition or similar technologies could bring to a paradigm shift in the use of biometric-based instruments for security purposes: that is, the rise of "emotional dominance". Yet, this phenomenon, its implications, and the design and deployment of these technologies might well be in friction with some International Human Rights Law (IHRL) standards – for instance, concerning the respect of the rights to privacy and data protection. And further reasons to consider the potential disruptiveness of these deployments *vis-à-vis* privacy issues in the military domain also involve the psychological repercussions that extensive, intrusive, and prolonged surveillance practices might cause to civilian populations. Against this background, and thanks to the introduction of the concept of "emotional dominance", the performed analysis will explore tensions arising from the deployment of advanced AI-powered technologies, such as "emotion recognition", and their impact on fundamental human rights – in particular, the rights to privacy and data protection.

Keywords: Biometrics; Security; Armed Forces; Emotion Recognition; Data Protection; Privacy; Human Rights

Biography

Francesco Paolo Levantino is a PhD Candidate in International and European Human Rights Law at the Sant'Anna School of Advanced Studies of Pisa (Italy). His main research interests concern the intersection of human rights and modern technologies. Particularly, he is currently investigating the role that applications of AI such as emotion recognition can play in the context of law enforcement practices. Before starting his PhD, he obtained the European Master's Degree in Human Rights and Democratisation (EMA) with a thesis on the human

rights implications of the use of facial recognition technology. In 2018, he graduated summa cum laude in law from the University of Palermo (Italy). His master's thesis in criminal law received a special commendation and analysed the profound impact the adoption of pre-emptive counterterrorism measures brought to the structure of some criminal offences and the possible frictions with traditional liberal guarantees this might imply.

Balancing Human Rights with the Help of AI – The Case of Online Hate Speech in the Time of Armed Conflict

Anikó Szalai
Associate Professor (habil, PhD), Director University of Szeged Faculty of Law and Political Sciences International and Regional Studies Institute

Since the Russian aggression against Ukraine and the Israeli-Palestine armed conflict a growing tendency of online hate speech is visible. The identification and removal of online hate speech content has been a difficult task for human content moderators, mainly arising from the lack of clear legal criteria of what is hate speech, and the difficulty to differentiate between merely offensive or vulgar speech and hate speech. The use of artificial intelligence in online content moderation has spread in the past years, it is perceived as desirable innovation to assist or replace human content moderation. The positive side of the use of artificial intelligence is to tackle the ever-growing amount of online content, to reduce the costs of moderation and to exclude human discretion. However, the negative side is that at the current development phase of AI it is over-inclusive in considering certain texts hate speech which actually are not and thus results in the limitation of freedom of expression. Understanding context, knowing the constantly changing language and also the applicable legal standards are highly relevant when analysing speech or text in order to decide whether it is hate speech or not. A human rights-based regulatory approach to deal with AI is necessary and the drafting of a convention on artificial intelligence and human rights is underway in the Council of Europe. This lecture aims at taking a legal snapshot at the crossroads of 1) online hate speech in the context of armed conflicts, 2) the case-law of the European Court of Human Rights with respect to online freedom of speech, 3) the Council of Europe's draft convention on artificial intelligence and human rights, and 4) legal limitations on the freedom of speech specifically with respect to the armed conflict.

Keywords: AI, Human rights, Hate speech, Armed conflict

Biography

Dr. Anikó Szalai is an associate professor of Public International Law and the Director of the International and Regional Studies Institute at the Faculty of Law, University of Szeged. She is the Dean's Representative for International Affairs at the Faculty of Law, University of Szeged. She is also the Director of the Academy of European Public Law in Athens, Greece.

Anikó Szalai defended her PhD dissertation titled 'The Effect of Armed Conflicts on Treaties' in 2012, and acquired habilitation in 2019, based on her research relating to the protection of the Roma minority under international and European law. Her main research areas are the law of treaties, human rights and international organizations. She is a regular lecturer at the International Human Rights and Humanitarian Law Master of the Europa-Universitaet Viadrina, Frankfurt Oder, Germany, and has been a visiting lecturer at several universities (e.g.

Prague, Angers, Belgrade) abroad. She is a member of numerous professional organizations, such as the Board of Directors of the European Public Law Organization (EPLO), the Presidency of the United Nations Association Hungary, and the European Society of International Law (ESIL).

PANEL 10 AI AND DISCRIMINATION

Fundamental Rights: A Way to Tackle Gender Bias in AI

Anka Supej
Council of the EU

Olga Markič
Professor of Philosophy, Department of Philosophy, Faculty of Arts, University of Ljubljana

The tools developed with AI algorithms are increasingly used in policymaking and in the legal profession, where their use may be subject to more scrutiny. They are also used on social media and in other more informal settings where their impact is not as easily assessable. The list of risks associated with AI, which includes questions of transparency, explainability, bias, autonomy, carbon intensity, power dynamics and other, is getting more complete as we are all undergoing what some call a mass social experiment. Among these risks, we focus on gender bias exhibited by natural language processing and generation tools which is one of the risks extensively discussed in literature, including our own studies of the Slovenian language tools. While recent years have seen plentiful studies on verifying the existence of gender bias in NLP tools and proposing methods to decrease it, researchers agree that the field still lacks standardised gender bias quantification techniques and, most importantly, a normative definition of ''gender bias''. These may be the reasons why gender bias continues to be inadequately handled by developers of NLP tools. In this paper the authors explore whether interpreting gender bias through the framework of fundamental rights could remedy the current lack of its normative handling.

Keywords: Artificial intelligence, transparency, bias, gender bias, natural language processing, fundamental rights

Biography

Anka Supej holds a BSc from Amsterdam University College and MSc (Philosophy) from University of Ljubljana, where she focused her research on gender bias in language and artificial intelligence tools. She works as a data scientist at the General Secretariat of the Council of the EU.

Olga Markič is lecturing different courses at the Department of Philosophy and at the Joint interdisciplinary master's program in Cognitive science (Mei:CogSci). Her main areas of research are Philosophy of Cognitive Science, Philosophy of Mind, and Logic and Theory of Argumentation. She recently published a book together with Toma Strle *O odločanju in osebni avtonomiji* (2021).

Moving Beyond the Prohibited Grounds Approach: Towards New Approaches in the Legal Governance of AI Algorithmic Discrimination

Keketso Kgomosotho
Ars Iuris fellow at the University of Vienna

As witnessed in recent years, the use of data-driven systems and Ai algorithms in decision-making processes has become more prevalent across various industries and government use cases. At the same time, there are growing concern over Ai capacity to (re)produce discriminatory and biased decisions, predictions, or outcomes - while ostensibly complying with legal restrictions and regulations. The presentation will focus on the intersection between international non-discrimination law, and algorithmic discrimination. Specifically, the presentation will speak to whether the current legal approach to discrimination (which I call the "prohibited grounds approach") remains sufficient in governing (proxy) discrimination produced by Ai algorithms in the context of decision-making processes that bear an impact on individual human and legal rights. In addition, the presentation will speak to the implications on the right to a remedy under international human rights law, where algorithmic discrimination occurs. Finally, the contribution will explore possible alternatives approaches to the governance of algorithmic discrimination.

Keywords: Algorithmic Decision-Making, Algorithmic discrimination; international non-discrimination law; legal governance; proxy discrimination; right to a remedy; right to a human decision

Biography

Keketso is an attorney and researcher from South Africa, with extensive experience in international law, human rights and emerging technologies. Informed by a human rights background, his work is currently focused on the relationship between artificial intelligence and existing international legal frameworks. He is currently an *Ars Iuris* Fellow at the University of Vienna, where he is conducting his doctoral research on how algorithmic discrimination interacts with international non-discrimination laws. He is especially interested in exploring how people from less developed countries (the "global south") and vulnerable groups are impacted. Keketso holds a master's degree in international law from the University of Pretoria.

Algorithmically Coded Biases and Regulatory Response – Labour and Healthcare

Kitti Mezei
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Anikó Träger
Project researcher, HUN-REN Centre for Social Sciences, Institute for Legal Studies

Discrimination based on specific protected characteristics (gender, ethnicity, marital status, etc.) is a common problem. Discrimination is addressed in several human rights documents, and provisions to avoid discrimination are also found in sectoral rules (e.g., labour law). Implicit bias refers to the biases and stereotypes formed based on the data on which AI systems are trained. In many cases, this is not a conscious decision but an outcome that is explicitly against the goal of the algorithm user due to some bias in the database used. Explicit bias refers to the conscious choices that AI developers make when designing algorithms. The leading causes of implicit bias lie in data bias and data collection methods, while explicit bias is often based on the biases of designers and developers. Biases in AI can cause serious discrimination problems, for example, favouring one group over another, especially in job interviews or making decisions in education and healthcare. This can lead to human rights violations and increase injustice and inequality in society because of the importance of these areas of expertise. Transparency can help combat bias in AI. Increasing transparency and verifiability will allow external parties to assess the functioning of AI systems and propose corrections when discrimination problems arise. Reducing bias in AI requires continued commitment and joint efforts by industry, legislators, and society. The research demonstrates that AI systems can quickly reproduce social discrimination without conscious efforts and highlights the need for ethical and responsible development to protect human rights. To reduce this, AI needs to be regulated in a way that considers the technology's specificities and maintains human oversight.

Keywords: AI, bias, discrimination, human oversight, transparency, human rights

PANEL 11 AI AND HUMAN RIGHTS IN THE METAVERSE

AI and Human Rights in the Metaverse

Maria O'Sullivan
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This paper discusses the interaction between AI and extended reality (XR) and the implications this has for human rights law. AI and XR are different systems but are currently being used in conjunction with each other in a number of applications. For the purpose of human rights law, one important development is the use of AI to create avatars which are accurate digital versions of users based on their data ('personal digital twin'). AI can also be used to create spaces or content in XR. However, XR currently operates in a 'human rights vacuum' because integral components of XR, such as avatars are not considered 'human'. As a result, individuals using XR platforms such as virtual reality glasses and online gaming do not receive the protections of human rights law that would otherwise apply to them in the 'real' world. These new technologies also create new avenues for online harassment and abuse. This raises particular problems for the protection of women's rights and for other vulnerable groups. My project will examine the application of human rights law in the AI-XR context by undertaking a deep legal analysis of the conceptual underpinnings of XR and building upon this to address some of the practical challenges in this area. Specifically, it will utilise existing academic legal and philosophical literature on what it means to be 'human' and 'non-human' to analyse how XR components such as avatars should be categorised. Additionally, it will identify potential human rights issues in the XR context, such as the protection against inhumane treatment and the right to freedom of expression.

Keywords: Metaverse, extended reality, avatars, digital twins, online harassment, personhood

Biography

Maria is an Associate Professor at the Deakin Law School in Melbourne, Australia. She holds an LLM in International Human Rights Law from the University of Essex in the UK and a PhD in Law from Monash University. Maria is the author of a number of international and national publications on the subject of human rights, public law and technology. Her recent publications include 'Automated Decision-Making and Human Rights: The Right to an Effective Remedy' in J Boughey and K Miller (eds) *The Automated State: Implications, Challenges and Opportunities for Public Law* (Federation Press, 2021) and 'Revitalising Public Law in a Technological Era: Rights, Transparency and Administrative Justice' (2020) 43(3) *UNSW Law Journal* (with Y-F Ng, M Paterson and N Witzleb). Maria's work has been cited by the High Court of Australia, the European Court of Justice and in a number of government inquiries

AI and Personal Digital Twin: Who has the Rights?

Gregor Dugar
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In recent times, the world has been most captivated by the development of artificial intelligence (AI). It is expected that in the future, the development of AI will be even more intense and faster, resulting in increasingly advanced AI systems. Additionally, AI is anticipated to become more prevalent in our lives. The development of AI has led to new possibilities in its use in the virtual world or any other form of avatar application, that were previously not feasible. I am not referring to cases where the AI algorithm is impersonal (e.g., an avatar for assisting users on a specific website), but rather cases where the avatar or AI powering it is created based on a multitude of diverse data about a specific person, such as records, images, audio recordings, etc. In such cases, the avatar will not only visually and audibly reflect the characteristics of a particular physical person in the virtual world but also be driven by an AI algorithm prepared to learn from various data about that person. In this scenario, AI, through learning from all the data about an individual, can to a certain extent recreate (or "bring to life") that person in the virtual world, giving third parties the feeling of interacting with that person. Therefore, the author suggests that in such cases, instead of using the term "avatar," the more appropriate term is "Personal Digital Twin." Such digital recreation of individuals using AI raises not only ethical questions but also numerous legal issues. The author focuses on analysing the relationship between the natural person and the Personal Digital Twin, as well as the relationship with third parties, primarily from the perspective of safeguarding human rights, both during the individual's lifetime and posthumously.

Keywords: Personal Digital Twin, Avatar, Virtual World, Metaverse, Artificial Intelligence, Human Rights

AI Technology as a Legal Entity and its Protection from Discrimination

Anže Mediževec
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Undeniably, the development of artificial intelligence (hereinafter: AI) technology is rapidly progressing. In 2017, the European Parliament discussed in its Resolution on Civil Law Rules on Robotics the possibility to create a specific legal status for the most sophisticated autonomous robots – a status of electronic persons – to address questions of robotic civil liability. Another example of rapid AI development is the story of Google chatbot »LaMDA«, which was described by some as »sentient«. Amidst the ongoing technological advancement, chatbot »LaMDA« – leaving aside whether it truly did achieve sentience already – perhaps demonstrates that AI may indeed at some point reach such levels of self-awareness observable in human beings. Despite this still being a rather futuristic concept, the thought alone provokes questions of, arguably, »human« rights protection. Assuming that AI technology will reach the standards of »existence«, thus mimicking the human person in the most existential way, it remains to be answered how, if at all, AI may be incorporated into existing concepts of human rights. Thus, this paper delves into the very fabric of the contemporary international legal framework of human rights protection, aiming to scrutinise whether one of its elemental and guiding principles, the prohibition of discrimination, could, eventually, cover within its ambit advanced creations of AI. Could the latter be protected from discrimination, also *vis-à-vis* human beings? By analysing universal and regional human rights treaties (e.g., the Universal Declaration of Human Rights, the African Charter of Human and Peoples' Rights) the author examines the genesis of each document, while carefully considering the objectives of the historic drafters as to the scope of coverage, to reveal their potential with relation to advanced creations of AI. The research conducted is set to challenge existing perceptions within the contemporary international human rights protection mechanisms when faced with an ever-developing world of AI.

Keywords: Protection from Discrimination, AI Legal Personality, Advanced Artificial Intelligence, Human Rights and Artificial Intelligence, Human Rights Law, Electronic Persons, Robotics

Biography

Anže Mediževec is a teaching assistant at the Department of International Law, Faculty of Law, University of Ljubljana, where he also obtained his Master's degree in International Law (*cum laude*) in 2022. In 2023, he obtained an LL.M. in European Union Law from the Collège d'Europe/College of Europe (Belgium) as part of a bilingual LL.M. programme (English and French) with the highest honour - *summa cum laude*. He was also awarded the Evens Foundation Prize for the best master's thesis on an interdisciplinary subject of the 2022/2023

generation for his thesis at the Collège d'Europe/College of Europe. Afterwards, he worked as a summer school assistant at the Collège d'Europe/College of Europe (summer 2022). Still as a student, he acted as a *liaison officer* at the Ministry of Foreign and European Affairs of the Republic of Slovenia during Slovenia's presidency of the Council of the European Union in 2021, and at the National Assembly of the Republic of Slovenia for the 2022 Conference of Speakers of the EU Parliaments. He is actively involved in the United Nations Association of Slovenia, as a member of the Board of Directors of the Youth Section of the Association (2022-2024), as Editor of the Association's online media webpage pOZNavalec (2022 onwards) and as a member of the Supervisory Board (2024 onwards). He is also a member of the International Law Association for Slovenia, which is part of the global International Law Association. His research focuses primarily on questions that merge international law with European Union law, the right of peoples to self-determination, and on the European Union's common foreign and security policy.

A Macro-threat Approach to Human Rights Posed by AI Capitalism

Roberto Navarro-Dolmestch
Associate Professor of Criminal Law, Catholic University of Maule (Chile)

There have been both positive and negative descriptions of the relationship between AI and human rights. From the positive perspective, it highlights how AI can contribute to the realization of human rights. Conversely, the negative perspective is determined by the threats AI poses to these rights' validity. Privacy, non-discrimination, and guarantees in the criminal justice process are some of the most common cases in this type of analysis. This approach could be termed a micro-threat approach because it is constructed around specific interferences in the relationship between the rights holder and AI. While the authors advocating this negative micro-threat approach have valid points, as these threats are indeed real, this paper proposes to challenge it. It argues that a more precise perspective should focus on AI's macro-threat approach to human rights. This proposed approach contends that AI has the potential and capacity to reshape capitalism's logics and structures, in what has been termed "algorithmic capitalism" (Mittelman, 2022) or "AI capitalism" (Verdegem, 2022). This new discourse intensifies the negative aspects of capitalism, including oligopolistic markets with a high concentration of productive assets in the algorithmic economy (Ernst, 2022), such as information, highly specialized knowledge, and exclusive dominance of computing processing capacity in big tech companies. Algorithmic capitalism represents a structural threat to human rights and all individuals (hence the term macro-threat). This threat occurs through two avenues. Commodification of areas of reality that fall under the essential content of human rights is the first way. Privacy is the finest example. The protection this right affords to individuals' data is strongly challenged by algorithmic capitalism, which views this data as top-tier intangible assets, treating them as commodities (Verdegem, 2022). Since AI cannot be trained or operated without data, this underscores the significance of information in AI capitalism. Consequently, data is subject to market rules, which by definition stand in stark contrast to what constitutes a fundamental right. Therefore, algorithmic capitalism represents a macro-threat to fundamental rights. This means that the threat is not limited to specific relationships protected by fundamental rights concerning an individual or group of individuals. Instead, this threat is structural in nature. The solution does not lie in timid regulations. Regulations, to effectively protect rights, should remove the essential content of those rights from market rules. For example, personal data should cease to be treated as commodities.

Keywords: AI Capitalism, Human Rights

Biography

Roberto Navarro-Dolmestch: holds a PhDin Law (2021), Lecturer at the Catholic University of Maule, Chile. Member of Research group on Criminology, Legal Psychology and Criminal Justice in the 21st Century (www.ecrim.es). Researcher in Project "Application of Artificial Intelligence to Criminal Law" funded by Chilean Government (Fondecyt Iniciación N°

11230216). Member of the research team at Project “Artificial Intelligence liability: A challenge for criminal sciences”, funded by Spanish government (PID2020-112637RB-I00, Ministerio de Economía y Competitividad, España).

PANEL 12 AI AND MIGRATION

The Use of AI in the Fields of Asylum and Migration and Human Rights: The Intricacies of the Public-Private Divide

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Traditionally, human rights primarily address the state. This particularly holds true with respect to the fields of asylum and migration which are, after all, dominated by state actors. We are reminded time and again that it is the prerogative of sovereign states to control who crosses their borders. Inasmuch state authorities make use of AI in these fields, the main responsibility for human rights interferences and violations lies with the state indeed. However, AI applications are mostly developed in the private sector, notably by private companies, and public authorities' ability to supervise the human rights performance of such applications is often limited, notably given their technical complexity and the lack of pertinent knowledge and expertise in the public sector. Hence, if there exist biases in the datasets used or other problems with the algorithms underlying the AI applications that are prone to give rise to human rights violations, state authorities will regularly find themselves in a rather weak position to identify, and remedy, those violations. The fact that asylum seekers and migrants who are made subject to these AI applications typically have limited resources and opportunities to challenge weaknesses in the design and implementation of AI applications further adds to the problem. This raises the question what quality standards and procedures state authorities should apply, from a human rights perspective, in order to tackle the aforementioned risks. Beyond that, it casts light on the more fundamental question of the continuing relevance of the traditional public-private divide for the purposes of IHRL.

Keywords: AI applications, asylum, migration, private actors, public-private law divide, state actors

Biography

Since 2023, Andreas Müller works at the University of Basel – Chair of European Law, Public International Law and Human Rights. Previously he was a Senior Grotius Research Fellow, University of Michigan Law School, as well as acted as Full Professor, Department of European Law and Public International Law, University of Innsbruck. Sinc 2020, he is a Reserve Member for Arbitration Panels (Art. 171 EU-UK Withdrawal Agreement). Between 2014 – 2023, he was a Member of the Monitoring Body of the State of Tyrol for the Implementation of the UN Convention on the Rights of Persons with Disabilities. For his work, he was awarded numerous przes and awards, including: the Leopold Kunschak Prize for Scientific Research (2018), the Research Prize of the Principality of Liechtenstein (2017) and the Kardinal Innitzer Research Prize (2017).

AI and Migration: Framework for Understanding Automated Decision Making and Regulation

Sanzhuan Guo
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Tim McFarland
Honorary Research Fellow, University of Queensland; Partner Solicitor, McFarland's Solicitors Pty Ltd.

As so often happens in respect of technological change, the uptake of automated decision-making (ADM) has progressed far more rapidly that the regulatory efforts that attempt to govern it. The capabilities and range of applications of ADM systems are expanding into ever more areas encompassing new types of decisions and their behaviour is constantly changing and becoming more sophisticated. Consequently, regulatory efforts are too often focused on playing catch-up with new developments rather than guiding the overall integration of ADM into public decision-making, and important fundamental matters remain under-examined. How can authorities be confident that the substance of ADM-made decisions is consistent with legal requirements that might not have been formed with artificial systems in mind? What measures can be adopted to ensure that the behaviour of an authorised decision-maker who employs an ADM system is consistent with legal principles and rules that might not contemplate involvement of an artificial entity in the decision-making process? New forms and applications of ADM reveal shortcomings and challenges to be overcome as quickly as they reveal new strengths and benefits to be enjoyed and calls to constrain use of ADM in various ways are made as often as calls to speed its uptake. The task of designing regulatory efforts which realise the benefits of ADM while remaining consistent with all the principles and rules of administrative law becomes increasingly difficult. This paper takes the view that there would be significant benefit in organising the various concerns into a coherent framework around which responsible regulatory efforts can be constructed. Through a case study of ADM in migration, the paper proposes a simple schema for categorising issues which need to be addressed, surveys the issues that fall in each category and suggests regulatory measures that might best suit each type of issue.

Keywords: AI, Migration, Automated Decision-making, Administrative Law, Regulation

Biography

Sanzhuan (Sandra) Guo is a Senior Lecturer in Law and Socio Legal Studies at Flinders University, Australia. She has a PhD in international human rights law from Peking University Law School (China), JD from Melbourne Law School (Australia) and LLM from Northwestern University School of Law (USA). She is an international lawyer with research focus on human rights and international migration law. Sandra has been qualified to practise law in three distinct jurisdictions: China, USA (New York) and Australia (Victoria and South Australia). She has been an accredited immigration specialist in Australia since October 2016. She led Flinders Migration Clinic from 2015 to 2017 providing pro bono legal services to asylum seekers.

Sandra is currently a Co-Rapporteur of the Committee on International Migration and International Law of the International Law Association (2021-2026).

Tim McFarland is a Research Fellow in the Law and the Future of War research group at the University of Queensland and a practising solicitor at McFarland's Solicitors Pty Ltd. He conducts research on the legal implications of autonomous systems and artificial intelligence, with a focus on issues arising under the law of armed conflict. Prior to joining UQ he was a member of the Values in Defence & Security Technology research group at the Australian Defence Force Academy. He completed his PhD studies at Melbourne Law School. His PhD thesis on autonomous weapons was published as a monograph by Cambridge University Press in 2020. Tim has also been practising immigration law since 2022.

Algorithmic Decision-making in Migration and Security in the EU: Challenges in Ensuring Effective Legal Remedies

Tamas Molnar
EU Agency for Fundamental Rights, legal research officer - project manager/ Corvinus University of Budapest, Department of International Relations, lecturer (international migration law)

In recent years, discussions intensified at the EU level on the potential use of AI-driven technology in the area of migration and border control; and the new generation of large-scale EU IT systems (e.g. ETIAS) will start using algorithms to screen third-country nationals against risk profiles. If carefully conceived, implemented and monitored, AI could bring substantial opportunities to improve the efficiency of migration management, while safeguarding and eventually strengthening fundamental rights. Yet, there are also a wide range of risks from the fundamental rights perspective, which include questions about access to effective remedies in case of algorithmic decision-making/AI supported decisions. The right to an effective remedy (Article 47 of the EU Charter; Article 13 of the ECHR) equally applies to decisions taken with the support of AI technologies. Algorithms/AI used for decision-making can challenge the right to an effective remedy in different ways. This makes access to remedy – available in principle still at national level, via general system of remedies – more difficult against decisions supported by AI technology, coupled with the difficulty for affected persons to rebut the results of the algorithm and that remedial bodies, including courts, might not be in the position to provide such remedy at present (due to the lack of knowledge by judges, hence their empowerment is key). After outlining the European legal framework applicable to this intersection of AI and access to justice, this paper will zoom in on two case studies to illuminate the specific challenges the right to an effective (judicial) remedy faces within the context of AI used for migration, border management and law enforcement: 1) the ETIAS screening rules (also discussing the possible interferences with the right to good administration); and 3) the use of algorithmic decision-making under the PNR Directive (Directive (EU) 2016/681) as interpreted by the CJEU and the right to an effective remedy against 'false positive' decisions based on algorithmic risk assessment/profiling.

Keywords: algorithms, artificial intelligence, EU law, ETIAS, PNR, right to an effective remedy,

Biography

Dr. Tamás MOLNÁR (1980) studied law in Budapest (ELTE University, Master of Laws) and Brussels (Université libre de Bruxelles, Institute d'études européennes, LLM on EU law) and holds a PhD in public international law (Budapest). He got his post-doctoral teaching-researching qualification ('habilitation' – Dr. habil) in public international law at ELTE in February 2022. Since September 2016, he has been working as a legal research officer at the EU Agency for Fundamental Rights (FRA) in Vienna, where his portfolio covers asylum, borders and migration as well as AI and fundamental rights. He is currently managing FRA's multi-annual research project on 'remote biometric identification for law enforcement purposes: fundamental rights considerations'. Previously, he co-drafted FRA's 2019 focus paper on facial

recognition technologies in the context of law enforcement and FRA's 2020 report on AI and fundamental rights in the EU. Before joining FRA, he worked for a decade in various ministries in Hungary in the fields of international and EU migration law and their domestic implementation (drafting legislation and negotiating treaties). He is also a visiting lecturer on international law at the Department of International Relations at Corvinus University of Budapest; and a module convenor/associate tutor in the e-learning MA in Refugee Protection and Forced Migration Studies at the University of London, School of Advanced Study. Between 2014 and 2018, he completed a four-year postdoctoral research project financed through a research scholarship awarded by the Hungarian Academy of Sciences (topic: interactions between EU law and international law). LinkedIn: http://hu.linkedin.com/pub/tamás-molnár/12/a32/65b.

AI and the Right to Interpretation in the Asylum Procedure: Friend or Foe?

Špela Bibič
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With daily advances in the field of artificial intelligence and the rampant use of modern technologies in all areas of life, justice systems around the world are following suit. However, these technologies, paired with constant pressure for the expediency and efficiency of asylum procedures, carry moral, ethical and other implications, putting the quality of interpretation services as well as the individual's rights to the test. The relatively loose regulatory framework of international law on the right to interpretation in the asylum procedure leads to ambiguities as to what this important procedural guarantee encompasses, thus putting the asylum seeker in an uncertain position. The paper aims to explore the right to interpretation in the asylum procedure in the context of international law, particularly as it relates to the use of AI and procedural guarantees in terms of the right to information, the right to be heard, the right to the free assistance of an interpreter, and the right to use a language that the person understands. It draws on the concept of linguistic justice, focusing on five aspects, namely the social power of law and language, the right to interpretation as defined in certain key sources of international and EU law, the specifics of interpreting in asylum procedures, an overview of the relevant caselaw, and an analysis of AI practices in asylum procedures today. In the light of new challenges brought on by mass migration, countries and the international community as a whole must find a responsible way to make the most of new technologies, while at the same time ensuring respect for human rights.

Keywords: International refugee law, international human rights law, procedural guarantees in the asylum procedure, interpreting, translation, artificial intelligence

Biography

Under-Secretary at the Secretariat-General of the Government of the Republic of Slovenia, Translation and Interpretation Division, Gregorčičeva ulica 20, 1000 Ljubljana, Slovenia

Špela Bibič holds a BA in translation studies and an MA in law. Before joining the Government's Translation and Interpretation Division, she spent nearly eight years working as a freelance translator. She was also active in various NGO initiatives, focusing specifically on LGBTIQ+ and women's rights.

PANEL 13 AI AND LAW ENFORCEMENT

Algorithmic Facial Recognition in Criminal Justice and Presumption of Innocence

Anastasia Nefeli Vidaki
Cyber and Data Security Lab, Vrije Universiteit Brussel

Presumption of innocence constitutes a vital aspect of the right to fair trial and as such it is recognised worldwide on a constitutional level. Moreover, it is foreseen in transnational legislation, with the most prominent in the European sphere being Article 6(2) of the ECHR and 48(2) of the EU Charter of Fundamental Rights. Referring to ongoing criminal proceedings, this safeguard is a prerequisite both of a fair judicial process and of procedural treatment by the law enforcement and judicial authorities. It has been proved that AI-augmented facial recognition technologies (FRT) training data might contain biases that tend to produce high rates of false positive or false negative results placing a disproportionate burden on certain vulnerable groups of people based mainly on their gender, race or social circumstances. This development alters the traditional perception of presumption of innocence in criminal cases. Consequently, the suspects carry the responsibility of proving that they are not the ones the system identifies them to be and to escape from the 'digital fate' imposed on them. A wrongful match might provoke further policing of the subject under investigation or even being used as evidence in the court proceedings. This scenario seems menacing taking into account the possibility that this evidence due to the phenomenon of automation bias will be favoured against contradicting ones, leading to further stigmatization of specific groups. Although the principle is not relevant for the preventive phase, recently the application of mass surveillance programs for law enforcement has been blamed for weakening presumption of innocence. Instead of being treated as righteous, every citizen is confronted as a potential suspect, posing a threat on the rule of law and democracy in criminal procedure. This paper discusses the questionable accuracy AI FRT that render its exploitation in criminal justice questionable and provides some suggestions.

Keywords: Artificial intelligence, criminal proceedings, algorithmic facial recognition, *in dubio pro reo*, presumption of innocence

Biography

Anastasia Nefeli Vidaki was born and raised in Athens, Greece. She majored in Law in the Law School of Aristotle's University of Thessaloniki. She continued her master studies in Law, Information and Communication Technologies in the University of Piraeus and Sociology of Law, Science and Technology in the Law School of the National and Kapodistrian University of Athens, graduating from both master programmes cum laude. She is currently a PhD Candidate in the Faculty of Law and Criminology and a Researcher at the Cybersecurity and

Data Protection Lab at Vrije Universiteit Brussel. Since her bachelor studies, she has been really interested in the interaction between law and new technologies, taking part in seminars, student conferences, legal research groups, hackathons and writing articles. She is the administrator of a webpage on world art and a fluent speaker of six foreign languages.

Does AI Pose a Challenge to the Transformational Potential of Digital Evidence?

Jess Peake
Director, International and Comparative Law Program Assistant Director, the Promise Institute for Human Rights UCLA School of Law

Digital evidence has the potential to transform the accountability landscape as it can be highly probative in establishing the necessary *mens rea* and *actus reus* of international crimes. However, several obstacles must be overcome to use it effectively for war crimes prosecutions. In particular, the reliability of digital information is increasingly being called into question because of the fear of media manipulated by Artificial Intelligence (AI), as well as deliberate disinformation campaigns by parties to conflicts utilizing AI generated content. These remarks will unpack some of these challenges and suggest some ways in which governments and big tech should put in place measures to increase the integrity of online content, and how law enforcement, investigators and lawyers can gather, authenticate, archive, and establish chain of custody to ensure that digital evidence is not artificially generated and can be used in accountability processes.

Keywords: digital evidence, accountability, disinformation, international crimes

Biography

Jess Peake is the Assistant Director of the Promise Institute for Human Rights and the Director of the International and Comparative Law Program at UCLA School of Law. Jess is an expert on digital investigations, human rights and international criminal law. She co-founded the University of California Digital Investigations Network in 2021 and teaches courses on Human Rights and War Crimes Digital Investigations and International Humanitarian Law. Jess was nominated for a Pulitzer Prize in 2023.

Expert Opinions on the Application of the AI Act on the Use of Personal Data for Law Enforcement Purposes

Anton Gradišek
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Gizem Gültekin-Várkonyi
Assistant Professor, University of Szeged, Faculty of Law and Political Sciences, Szeged-Hungary

The Artificial Intelligence Act (AI Act) proposed by the European Union (EU) has been under an ongoing discussion not only by the EU institutions who currently are to make a decision on amending or accepting the draft, but also by the legal-technical scholars. While the theoretical outlook of the AI Act seems promising to solve many issues raised in the intersection of AI and human rights, exceptions regarding use of AI technologies for law enforcement purposes placed in the text are the main reasons for one of the hottest debates. These debates, either by the members of the variety of the EU institutions or by the scholars, are derived from two main ideas: either to leave out law enforcement to benefit from the opportunities that AI technologies promise or let them to practice with these technologies regardless of their high risks. Since the good judgment behind the AI Act is to permit or not to permit use of AI technologies based on their risk categories which currently are four of them, assessment of the risks posed by AI in law enforcement plays a crucial role. The initial aim of this research is to gather expert opinions on the possible risks caused by the application of AI technologies by the law enforcement bodies from the aspects of personal data processing. While discovering what other risks may arise different than current literature refers to, expert opinions on the practicability of the AI Act for law enforcement purposes will provide a new input to the literature. Even though there is no standard way of assessing the risks posed by AI, practices directed by the application of the General Data Protection Regulation (GDPR) offer, at least, a basic impact assessment outline. The GDPR will be a considerable legal document interacting with the AI Act in case of personal data processing, since data is the blood of AI systems. This research will set up a scenario where a law enforcer uses an AI technology to: 1- to prevent a crime 2- to identify a crime and committers behind it. Both editings will include the issue of processing of biometric and health data by the enforcers. Then, technical and legal experts from Hungary and from Slovenia will be interviewed to interpret the scenario to identify the risks posed by the technologies referred to in the scenario, from the personal data point of view. Experts will also be asked to interpret the AI Act on the given scenarios. Finally, the authors will evaluate the GDPR aspect of the scenario with the help of the expert opinions, and come up with a possible risk assessment scheme based on these evaluations. Output of this research would help those AI providers who may hesitate where to start a risk assessment for their AI system.

Keywords: AI Act, Use of personal data, Law enforcement, GDPR

Biography

Anton Gradišek holds a PhD in physics. For the last decade or so, he is active in the field of artificial intelligence, in particular in applications in medicine. Through a series of human-centred projects, he became aware of the risks that the irresponsible use of AI can bring. He is particularly interested in explainable AI. His other interests include liquid crystals, nuclear magnetic resonance, AI in biodiversity, and bumblebees.

Gizem Gültekin-Várkonyi, holds a PhD in law. Her research area focuses on the EU's digital policy, but more specifically, on the applicability of the data protection rules of the EU on advanced technologies, such as AI and robotics.

PANEL 14: AI AND INTELLECTUAL PROPERTY: REVOLUTION OR ROBBERY

Can Copyright Bring Generative AI to its Knees?

Maja Bogataj Jančič
Open Data and Intellectual Property Institute ODIPI

Legal regulations around the world regulate the issue of whether training machines on huge amounts of data (big data) is allowed or not. In the USA, however, there are many disputes in which the courts decide whether training machines on copyrighted content is "fair use". In addition to current court cases, the presentation will present various legislative solutions around the world, and in particular the exceptions for text and data mining in the EU and Slovenia.

Keywords: copyright, data governance, copyright exceptions and limitations copyright, right to research, fair use

The Infinite Artist: Endless Challenges in Framing Copyrightable "Works" in EU Copyright Frameworks

Zachary Cooper
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In 2020, the European Commission concluded that current EU copyright rules are sufficiently flexible to deal with the challenges posed by AI-assisted outputs. Yet, with music production software already integrating generative AI tools to assist with composition while underground AI music pioneers develop infinitely generating yet aesthetically unique pieces, it is unclear how the current framework seeks to apply to works of *massive scale*. Critically, the current framework fails to elucidate how one might be able to ascertain whether a "work" is an expression of its authors intention or inputs. Blanket denial of all AI-assisted works as adequately "expressing" authorial intent absurdly undermines ownership in some of the most innovative work of contemporary artists. Yet, to accept generative AI tools as being capable of "expressing" authorial intent may grant authors copyright over massive amounts of endlessly generating copyrightable work. In this paper, the author elucidates the many challenges in applying the current European copyright framework to contemporary "infinite" generative works. In directly engaging with pioneering art and music communities, the author considers the consequences of varying interpretations of "expression" on current works, and to what extent these interpretations serve the foundational tenets of copyright law. As copyright has traditionally sought to stimulate both the respect for human creative spirit *and* innovative enterprise in the market, the author concludes to what extent differing interpretations of the current framework are still able to serve these tenets in tandem, and to what extent legal interpretation must preference one of these foundational tenets at the expense of the other. After illuminating the challenges in meaningfully applying the copyright framework to current pioneering "infinite" works, the author will suggest clearer means of ascertaining how and to what extent copyright should be held in infinitely generating content in order to best serve copyright's foundational tenets.

Keywords: Copyright, Intellectual Property, Generative Artificial Intelligence, Music Law, Art, Copyrightable Works, European Copyright Frameworks

Biography

Zachary Cooper is a PhD Candidate at the Vrije Universiteit Amsterdam, whose current research program investigates the disruptive effects generative AI systems are having on the foundational tenets of intellectual property law. He is currently the editor of the European Journal of Law & Technology, and previously served as the editor-in-chief of the Amsterdam Law Forum. Zachary's most recent paper (co-authored with Prof. Arno R. Lodder) "What's Law Got To Do With IT: An Analysis of Techno-Regulatory Coherence", which investigates when the law stops making sense in the wake of disruptive emergent technologies, will be published in Edward Elgar's upcoming *Research Handbook on Law and Technology* (December 2023).

Human Actors and Synthetic Performers: Whose Rights are Infringed?

Matija Damjan
Institute for Comparative Law at the Faculty of Law, University of Ljubljana

AI-powered performance synthetisation uses recordings of human actors' live performances to generate new 'synthetic' performances based on the actors' likenesses. Rather than merely manipulating existing recordings of performances, which are subject to performers' rights, AI uses them as training material based on which the algorithm can learn to imitate the actor perfectly, even in new roles. Performers in audiovisual works usually transfer all economic rights in their performances to film producers, giving the producers the right to re-use and modify the recordings of such performances, potentially also for the purposes of performance synthetisation. The possibility of their work being replaced by synthetic performers threatens performers' economic and moral interests. Hence, in the 2023 SAG-AFTRA strike, the actors' guild opposed the possibility of film studios using AI to create new performances based on footage of actors' previous appearances in films without the actors being able to decide or be compensated for doing so. Performers can already oppose the use of their digitally manipulated image and voice based on their moral right to object to any distortion, mutilation or other modification of their performance prejudicial to their honour or reputation. Actors can also resist the use of their image based on their personality rights, even if their likeness is not recreated based on past performances but by scanning their faces. However, a legitimate concern is that consent to such re-use of actors' likenesses will become a standard feature of actors' contracts with film producers, depriving actors of any effective legal protection against the generation of their synthetic performances. Actors whose individual likeness is less critical for the success of a film, such as supporting actors and especially extras, are in an even more precarious position as new AI-generated artificial characters might simply replace them.

Keywords: AI, actors, audiovisual works, deepfakes, performers' rights, personality rights

Biography

Dr Matija Damjan is an Associate Professor of civil and commercial law at the University of Ljubljana, Faculty of Law, and Secretary General of the Institute for Comparative Law attached to the Faculty of Law, where he is also active as a research fellow. He passed the State Examination in Law in 2005 after having worked for two years at the Higher Court in Ljubljana as a judicial trainee. He obtained his PhD at the Faculty of Law, University in Ljubljana, in 2007 and has been active in scientific legal research since then. Dr Damjan teaches Commercial Law and Intellectual Property Law at the Faculty of Law and Copyright Law at the Academy of Theatre, Radio, Film and Television, University of Ljubljana. In his research work, he primarily focuses on intellectual property law and information society law. He has authored and co-authored more than thirty scientific articles and monographs discussing issues in these fields. In 2020-2022, he was a member of the Data Governance Working Group at the Global Partnership on Artificial Intelligence. He is currently engaged in long-term research projects

on the legal challenges of the information society and the relationship between AI and human rights.

Training AI Models: A Case for Collective Rights Management?

Žiga Škorjanc
Department of Innovation and Digitalisation in Law, University of Vienna

In the burgeoning landscape of artificial intelligence (AI) development, the intricate interplay between innovation and intellectual property rights poses multifaceted challenges. This talk will examine the evolving discourse surrounding the training of AI models and discuss the proposed paradigm shift towards collective rights management. The discussion navigates through pivotal concepts including the definition of reproduction, the principles of fair use, the Text and Data Mining exemption, and the implications of the AI Act. Furthermore, it explores the emergent framework of digital constitutionalism in the context of AI development.

Keywords: AI Models, Collective rights management, AI, AI Act

Biography

Žiga Škorjanc is a postdoctoral researcher ("Habilitand") at the Department of Innovation and Digitalisation in Law, University of Vienna, Managing Director of lexICT GmbH Austria, Member of the European Union Intellectual Property Office (EUIPO) Observatory Legal Expert Group, and Advisory Board Member of the Digital Asset Association Austria (DAAA). Previously, he worked at a law firm in Vienna (bar exam, Vienna Regional Court of Appeals). He specialises in IT-, IP-, data protection and data law, as well as the use of technological innovations in the financial sector.

PANEL 15: AI, SPACE AND HUMAN RIGHTS

Smart Cities and the Current Challenges to Modern Urban Living: Approaches of the European Urban Charter III (2023)

Christina Binder
University of the Bundeswehr Munich

Urban living has been confronted with multiple challenges especially recently. Challenges included Russia's war against Ukraine, terrorism, the exacerbation of inequalities, an accelerated pace of climate change, natural disasters and the Covid-19 pandemic. All these have profound implications on Urban residents' right to life. At the same time, the development of smart cities, the increased use of digital tools and Artificial Intelligence have brought important transformations. On the one hand, smart cities have helped to address the challenges to the right to life caused by air pollution, the adverse effects of climate change and pandemic related disturbances through the development of modern e-governance, inter alia focussing on e-information and the implementation of open government standards. On the other hand, e-governance and smart cities themselves have possible adverse impacts on Urban residents' human rights, eg as regards data security, the processing of personal data and residents' control over their data. This presentation aims to deal with the potential but also possible risks of smart cities/modern tools of e-governance/the use of Artificial Intelligence in modern Urban life from the perspective of human rights and rule of law considerations. In doing so, the presentation will draw upon the recent revision of the European Urban Charter, as adopted by the Congress of Local and Regional Authorities of the Council of Europe in October 2023 which addresses the impact and possible use of new technologies and the role of Artificial Intelligence for Modern Urban Living (Digitalisation and Artificial Intelligence) in one of its six sections.

Keywords: Smart Cities, Modern Urban Living, European Urban Charter III (2023)

Biography

Dr. Christina Binder, E.MA, holds the Chair for International Law and International Human Rights Law at the University of the Bundeswehr Munich since April 2017. Before, she was University Professor of International Law at the Department of European, International and Comparative Law at the University of Vienna and Deputy Director of the interdisciplinary Research Centre "Human Rights". Christina was member of the Executive Board of the European Society of International Law (ESIL) 2014-2022 and also served as ESIL's Vice-President. She is member of the Council of the Global Campus of Human Rights since 2019 and Co-Rapporteur of the ILA Committee on Human Rights in Times of Emergency. Her research focuses on a number of public international law issues, including human rights, the law of treaties, international investment law, democracy and political participation as well as

international environmental law. She is general editor for the Inter-American system for the OUP Oxford Reports of International Law (ORIL) series, co-editor of the Zeitschrift für Menschenrechte, the European Yearbook of International Economic Law and of the Hungarian Yearbook of International and European Law and has widely published, in edited volumes and in peer-reviewed journals. Christina also served as legal and electoral expert for EU and OSCE/ODIHR election observation and assessment missions in several countries. She likewise acts as electoral expert for the Council of Europe Congress of Local and Regional Authorities and for the Venice Commission and is member of the Group of Independent Experts where she was rapporteur for the 2023 revision of the European Urban Charter.

AI and Public Participation: Can the Smart Cities' models be Applied to the Right to Participate in Environmental Decision-Making?

Maša Kovič Dine
Assistant Professor and Researcher, Faculty of Law, University of Ljubljana

Cities are striving to become increasingly "smart" and technologically-driven. Many are already employing AI for management of traffic, street lightning, water systems, waste disposal and energy efficiency of buildings. Consequently, the development of AI and its integration into urban planning and management processes is rising questions about the ability of citizens to meaningfully contribute to decisions that impact their local environment. The active involvement of citizens has been identified by many as a critical factor for the success of these smart city initiatives and many of the mentioned cities are already focusing on using the smart city models to increase public participation. For example Singapore collects citizens views on urban issues and Barcelona allows citizens to vote on various city projects. This presentation will indicate how these positive developments with the smart city models can be transferred to the requirement for public participation in environmental decision-making as defined by the Aarhus Convention. The integration of AI and smart technologies can aid in facilitating transparent and inclusive environmental governance. Namely, citizen engagement platforms powered by AI can provide real-time data and analysis on environmental issues enabling citizens to have the necessary access to environmental information. AI-driven tools can be leveraged to enhance public awareness and education on environmental concerns, empowering them to participate more effectively in environmental decision-making. AI systems can directly inform citizen of the environmental issues being discussed by the governments and offer an easy platform to actively express their opinions. Finally, the use of AI can facilitate the collection and analysis of public input, ensuring that diverse perspectives are considered in environmental policy formulation. By drawing parallels between citizen engagement in smart city models and the right to participate in environmental decision-making, we can establish mechanisms that align with the principles of the Aarhus Convention, promoting transparency, accountability, and inclusivity in environmental governance.

Keywords: smart cities, public participation, environmental governance, Aarhus Convention

Biography

Dr. Maša Kovič Dine is an Assistant Professor at the Department of International Law at the Faculty of Law, University of Ljubljana. After graduating the Faculty of Law, University of Ljubljana, she continued her studies at the Faculty of law, University of Toronto, where she also worked a few years at the Research Group for G7 countries. She defended her PhD thesis in International Environmental Law on the topic of international forest protection at the Faculty of Law, University of Ljubljana, where she has been teaching a wide array of courses at both undergraduate and graduate level. She is also a mentor to student teams competing

at international moot court competitions, a mentor of the International Environmental Law Clinic, and the conference coordinator of a series of international interdisciplinary scientific conferences entitled Contemporary Challenges of International Environmental Law and Responsibility to Protect in Theory and Practice. She has been a visiting scholar at the School of Law, University of Miami and a guest lecturer of the course Transnational Environmental Law at the Faculty of Law, University of Antwerp, Netherlands. She is a member of the IUCN World Commission on Environmental Law and its Rights of Nature Task Force and the secretary of the Slovene branch of the International Law Association.

AI-enhanced Space Technology and its Effects on Human Rights

Iva Ramuš Cvetkovič
Junior researcher at the Institute of Criminology at the Faculty of Law, University of Ljubljana, and a PhD student at the Faculty of Law, University of Ljubljana

In recent years, Artificial Intelligence (AI) has been incorporated into various examples of space technology. From processing of satellite data to collision-avoiding mechanisms in space objects, the role of AI in outer space is on the rise. The developers of AI, as well as actors in the space sector, have claimed that the inclusion of AI in space technology will contribute to its robustness and overall safety, but many critics have raised concerns regarding the negative impacts of such inclusion on human rights, in particular the right to life, the right to privacy, and the right to liberty and security. For example, some cases of AI-enhanced space technologies have failed to demonstrate the promised efficiency (notably the SpaceX collision-avoiding mechanism has been subject to critics due to some near-collisions) and have even been marked as a threat (automatic decision-making mechanisms have proven to be prone to bias and inaccuracy). These concerns, taken together with the fact that national laws on space activities often fail to address the AI aspect, and that the global “race to AI” has been closely followed by the “race to AI regulation”, resulting in the adoption of numerous sets of guidelines and principles, that create confusion and false sense of legal safety, call for action. Such action should start with a close and comprehensive examination of the effects of AI-enhanced space technologies, to establish a basis for stricter and more effective legal regulation. In my presentation I plan to evaluate whether these critics are justified, by analysing the effects of AI-enhanced space technology on the mentioned human rights, possible mitigations of negative effects as well as the effectiveness of the current legal framework governing the use of AI and space activities.

Keywords: AI, AI-enhanced Space Technology, Space Technology, Human Rights

Biography

Iva Ramuš Cvetkovič studied law at the Faculty of Law, University of Ljubljana. Specializing in international law, she finished her MA studies with a Master Thesis titled "Space law as lex specialis of international law". Afterwards she started working at the Institute of Criminology, where she currently researchers issues of law & technology, including space technology, AI and military technology.

AI and Space Settlement: Guaranteeing the Right to Life?

Katja Grünfeld
Research Assistant at the Institute of Air Law, Space Law and Cyber Law at the University Cologne

Artificial Intelligence (AI) is being widely employed in numerous fields, including the space sector and existing space systems to ensure safety of orbital space traffic and overall satellite applications, but does it lend itself to space settlements? Evolving technology is enabling an increasing number of space activities, inter-alia humanity's ambitious wishes for human settlement on celestial bodies. The Artemis mission, aiming to build first settlements on the Earth's Moon, fuelled by NASA, the European Space Agency and partners, has concluded its first test-stage with the successful liftoff of Artemis-I. The infamous non-State actor SpaceX, promising to land the first humans on Mars by 2030, has likewise celebrated the conclusion of the first test-stage of its humongous interplanetary Spaceship. Many more projects are in the works, however, before venturing out, questions regarding the legal framework of space settlements need to be raised. Studies show that settlers will depend on the safety of space stations, space suits, a steady delivery of supplies from Earth (of food, oxygen, water, tools etc.) and space resource extraction/development to survive. These artificial life-enabling conditions in a hostile extreme environment will result in deployment of experimental technologies (which may require risk-minimization) and potential for autocratic governance-structures. A system to guarantee basic human rights, particularly the right to life, deemed by the UN Human Rights Committee as the precondition for the fulfilment of all other human rights, therefore needs to be developed. This article will therefore examine what elements will become necessary to ensure the right to life in space settlements, and if and how AI could be utilized to safeguard this right, including which dangers lurk and how these could be mitigated, as well as to survey briefly on whether AI in charge of such settlements could have a claim on the right to life itself?

Keywords: AI, Space Settlement, Right to Life, NASA

PANEL 16: NATIONAL AND REGIONAL APPROACHES TO AI

AI and the Right to Life: A Perspective from Selected African Countries

John C Mubangizi
Free State Centre for Human Rights, Faculty of Law, University of the Free State, South Africa

This paper will explore the intricate relationship between AI and the fundamental human right to life, with a specific focus on the context of a few African countries. The paper will begin by establishing a contextual understanding of both AI and the right to life, examining their theoretical underpinnings and historical development. Drawing on selected African countries, this paper will examine the unique ethical, legal, and societal dimensions that influence the interaction between AI and the right to life. The study will consider factors such as access to AI technologies, data privacy, algorithmic bias, and the potential consequences for vulnerable populations, including those marginalized by economic disparities and limited access to healthcare. Furthermore, the paper will explore the efforts and initiatives undertaken by African countries to harness AI for the betterment of society while safeguarding the right to life. It will assess policy frameworks, regulatory measures, and international collaborations aimed at balancing the potential benefits of AI with the protection of human rights. The paper will then offer a nuanced perspective on the evolving relationship between AI and the right to life, emphasizing the importance of context-specific considerations in the African setting. Taking into account three contentious limitations to the right to life, namely, the death penalty, abortion and euthanasia, the paper will underscore the need for comprehensive policies, ethical guidelines, and technological solutions that promote the responsible and equitable deployment of AI technologies, ensuring that the right to life is upheld and enhanced in the face of these contentious issues. The research aims to contribute to the ongoing dialogue on AI ethics and human rights, with a particular focus on the right to life.

Keywords: Artificial intelligence, human rights, right to life, death penalty, abortion, euthanasia, ethics

Biography

John C Mubangizi is a Research Professor in the Free State Centre for Human Rights, Faculty of Law at the University of the Free State (UFS), South Africa. Before that he was Deputy Vice-Chancellor at the University of KwaZulu-Natal (2007 – 2017) and Dean of the Faculty of Law at UFS from 2018 to 2023. He is the author of the book entitled The Protection of Human Rights in South Africa: A Legal and Practical Guide (Juta & Company: 2004 and 2013) and has published numerous peer-reviewed journal articles on human rights. He has also presented papers at several national and international conferences. Professor Mubangizi has been an NRF-rated researcher since 2005. His current rating is a C-2. He is a Member of the Academy of Science of South Africa (ASSAf) and served as Advisor and Member of the ASSAf Council

(2012 – 2015). He also served as Chair of the Higher Education Quality Committee (HEQC) and a Member of the Council on Higher Education (CHE) of South Africa (2015 – 2018).

Realization of the Right to Water in Zimbabwe using AI

Placidia Vavirai
Emergency Water and sanitation Coordinator, IFRC

This article discusses the role of AI to human rights for the Zimbabwean population as it relates to access to water supply. Evidence indicates that in the global north are committing to investing money towards AI in comparison to the south. The author believes that when AI is handled well, it will benefit more the society. Certain ingredients need to be placed to bridge the gap in technology between countries that have more with those that are developing for the benefit of all. The author critically looks at the progress in the right to access to water for Zimbabweans where we see a significant urbanization, to enhance economic opportunities. AI could enhance forecasting and support people to prepare before deciding to move to cities where the service provision is already challenged. Village people lack the understanding of complex issues and need to be supported to better understand the implications on their rights. The author envisages that access to water can improve with support of AI, however the downside is that AI tends to reproduce rather than create and when situations require adjustment of legal frameworks AI is challenged. Evidence shows that the human right to water lags in Zimbabwe as evidenced by continued cholera outbreaks. Service providers need to capitalize on AI, maximize on information sharing, managing water bills, and create better response strategies and institutional financial interventions to support the public access water. The author is of an opinion that Zimbabwe has not taken progressed in provision of basic human rights including water access in both urban and rural as many people lack knowledge of good hygienic practices leading to deaths. Whilst all may benefit from AI, a lot of rethinking on the governing system is required as AI cannot be ahead of the basics.

Keywords: Right to water, Zimbabwe, AI

Biography

I am a Civil Engineer, with just over 20years of working experience in Domestic Zimbabwe and other East and Southern African Countries. I have worked with government and International NGOs in areas of construction, water, sanitation, and hygiene. I have been involved in different Programmatic contexts (emergency, post conflict, disasters) and have gained experience in coordination of operations, donor and stakeholder engagements, capacity building and research and evidence-based programming as well as reporting. I am interested in water governance issues including advocating for the less privileged where I see my role, not only relevant for humanitarian work but also importantly cementing the human rights of the people and calling governments to actions. Above everything, I am a mother of 4 children, whose future we should prepare by making this a better world to live in.

Corporate Governance in Indian Manufacturing Sector: Study of intersection of AI and Human Rights

Sheetal Gahlot
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Kanwal DP Singh
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Artificial Intelligence (AI), has revolutionized the business world, with benefits of accessibility, efficiency, and cost reduction. However, there is no legislation specifically designed to regulate the use of AI, except for the AI Act being finalized by the European Union. There is a need for improvement in the Indian legal system for using AI techniques and governing potential challenges associated with it. Companies worldwide have attempted the use of AI in corporate governance but contrastingly, legal frameworks around the world remain rooted in exclusively human decision-making and deny the role of technology in corporate decision-making. With 'Make in India' as a policy intervention, India stands at sixth place globally, as the largest manufacturing nation. Therefore, it imperative to analyze the influence of AI application on corporate governance in the manufacturing sector as it works across various business lines and levels, leading to standardization and streamlining production lines ultimately. With efficiencies, there will be a tendency towards discriminatory and fraudulent practices so it needs to be balanced with respect for human autonomy, prevention of harm, and upholding fairness and transparency. There is a need to harmonize human rights like stakeholder-oriented ('human-centric') corporate purpose with fair law and governance principles. The study therefore shall aim to: 1. To investigate the challenges faced by the Indian manufacturing sector in the implementation of AI vis-à-vis international mandates of Human Rights including right to privacy and data protection, non-discrimination, and accountability issues. 2. To study the implications of using AI in promoting better corporate governance and to find what steps are needed to promote a healthy intersection of human rights law and ethics to establish trustworthy AI in the labour-intensive manufacturing sector.

Keywords: Artificial Intelligence, Manufacturing, Corporate Governance, Laws, Human Rights

Biography

Sheetal Gahlot is a full-time Ph.D. Research Scholar and a recipient of the Indraprastha Research Fellowship at the University School of Law and Legal Studies, Guru Gobind Singh Indraprastha University, New Delhi, India. Her broad subject area of doctoral research is Sustainability of the Textile Industry in India through the prism of Taxation Laws. She completed her BBA LLB from the University School of Law and Legal Studies, GGS Indraprastha University. She has worked as an Assistant Professor after completing her masters in law in

International and Comparative Law from the West Bengal National University of Juridical Sciences. In addition, she has published and presented several research articles on the themes of international law, social justice, and human rights law.

Prof (Dr) Kanwal DP Singh is a Professor at University School of Law and Legal Studies, Guru Gobind Singh Indraprastha University, New Delhi, India. She was appointed as Dean of Law School from 2016 to 2019. And Director of Legal Aid from 2019 to 2022. She has been involved in workshops conducted by National Commission for Women, Ministry of Law and Justice; and became Principal Investigator in Indian Government funded three Ministry Action Projects. She is Vice-President of Asian Association of Law Professors; and lifetime member of Indian Law Institute, Indian Society of International Law, and Indian Institute of Public Administration. She has written three books, presented numerous papers in international conferences, and 69 publications in renowned journals on diverse themes.

AI and Human Rights in Japan

Yukari Ando
Institute of Liberal Arts and Sciences, University of Toyama

This presentation will delve into the significant 'AI Guidelines for Business' that were unveiled on 19th April 2024 by the Ministry of Internal Affairs and Communications and the Ministry of Economy, Trade and Industry in Japan, marking a crucial milestone in the field of AI regulation. The guidelines have been meticulously crafted to align with a multitude of international principles and regulatory trends, including the Recommendation of the Council on Artificial Intelligence (OECD), the Recommendation on the Ethics of Artificial Intelligence (UNESCO) and the EU AI Act, ensuring their global relevance and acceptance. The basic philosophies are 1) Dignity, A society that has respect for human dignity; 2) Diversity & Inclusion, A society where people with diverse backgrounds can pursue their own well-being; and 3) Sustainability, A sustainable society. The Common Guiding Principles states that “Each AI business actor should develop, provide, or use AI systems and services respecting the rule of law, human rights, democracy, diversity, and fair and just society in light of "Human-centric" Relevant laws, including the Constitution of Japan, Intellectual Property Basic Act and relevant laws, and Act on the Protection of Personal Information, as well as existing laws and regulations in individual fields pertaining to AI, should be observed, and it is important to pay close attention to the circumstances of the drafting of international guiding principles.” “Human-Centric” is explained as 1) Human dignity and autonomy of individuals, 2) Paying attention to manipulations by AI on decision-making and emotions, 3) Countermeasures against disinformation, etc., 4) Ensuring diversity/inclusion, 5) Providing user support and 6) Ensuring sustainability. How can Japan develop AI and effectively protect Human Rights from the perspective of “Human-Centric”?

Keywords: AI Guidelines for Business, Human-Centric, Dignity, Diversity, Sustainability

Biography

Yukari Ando is a professor at the University of Toyama in Japan. Her research focuses on protecting individuals, with a special emphasis on the right to life, ensuring that nobody is deprived of life arbitrarily, and advocating for access to humane treatment.

Equal Access to Public Services: A study on AI's in Greek Municipalities

Theodore Chadjipadelis
Professor, Aristotle University of Thessaloniki and Hellenic Open University

This study explores the connection between AI-driven digital transformation in Greek municipalities and human rights, with a specific emphasis on Article 25(c) of the International Covenant on Civil and Political Rights, which advocates for equal access to public service, with the aim to evaluate how these technologies impact citizens' rights to equitable public service access. Greece's public sector has increasingly integrated digital solutions to streamline services and enhance citizen engagement. However, aspects such as bias, inclusiveness and accessibility remain inadequately explored. Central to this investigation is the role of AI in either facilitating or hindering equal access to municipal services. The research employs a dual-method approach: 1. Qualitative Analysis: Conducting semi-structured interviews with municipal staff (internal users) to understand their experiences, challenges, and perceptions of the digital applications. 2. Quantitative Analysis: Survey to citizens (external end users) to assess the usability, accessibility, and inclusivity. The study aims to assess whether digital transformation initiatives are aligned with the principles of Article 25(c), ensuring that all citizens, irrespective of their background, have equitable access to these services. It also seeks to identify any digital barriers that might infringe upon this right, such as issues related to digital literacy, accessibility, and inclusivity. By examining both internal and external perspectives on AI and digital applications in Greek municipalities, this research is significant in the context of the evolving discourse on AI and human rights, offering a nuanced perspective on how digital transformation can both support and challenge the realization of fundamental human rights in the public sector. The findings are expected to contribute to the development of more inclusive and rights-aligned digital public services in Greek municipalities.

Keywords: AI, Digital Transformation, Human Rights, Public Services, Equality, Accessibility, Inclusivity

Biography

Theodore Chadjipadelis is professor of applied statistics and the director of the Laboratory of Applied Political Research. He also is the director of MD programs “Governance-Regional Development” (AUTH) and “Public Administration and E-Governance” (HOU). He has taught undergraduate and postgraduate courses on Statistics, Research methodology, Electoral geography, Theories of Decisions and Mathematics at the Aristotle University, University of Thessaly and the Hellenic Open University. His research interests cover the field of Applied Statistics and mainly refer to issues of experiment design, statistical research training, public opinion, political and electoral behaviour, electoral geography, election systems as well as urban and regional programming and development.

He coordinates the Greek section of the programme C.C.S. (Comparative Candidates Survey) – a co-operation between 30 research teams – and of C.S.E.S. (Comparative Study of Electoral

Systems). He also coordinates the Greek section of MeDem (Monitoring Electoral Democracy -he European Research Infrastructure to unlock the true potential of data-driven democracy research.

He represent A.U.TH in the HORIZON (101094905) project AI4Gov which is aimed at exploring the possibilities of Artificial Intelligence (AI) and Big Data technologies for developing evidence-based innovations, policies, and policy recommendations and to CERV (101147696) Solidarity4all which aims to drive empathy, solidarity, belonging and active citizenship through strengthening citizens' capacity and competencies to engage in the democratic life of European societies.

He has published more than 100 scholarly studies related to educational issues, applied statistics, electoral behavior models, public opinion analysis and urban and regional programming. He has participated in more than 100 conferences, in many of them as member of the organising committee. He has lectured on these subjects in Greece and abroad.

POSTER PRESENTATIONS

The Use of AI at Border Control and Record-Keeping on Migration

Alin Jakomin, Sabina Japić and Špela Polanc
Master students, Faculty of Law, University of Ljubljana

In the area of migration and asylum law, AI tools are increasingly being used to verify identities at EU borders and at the internal borders of EU Member States. These systems include biometric identification devices that scan fingerprints or faces detected in a specific environment. The data is then compared with a database to monitor and create a record of migration flows. Such use can lead to infringement of different human rights. In our poster we will focus on the prohibition of discrimination and the principle of proportionality. When considering data detected and collected through AI tools, information such as race, skin colour, appearance or ethnicity (may) be a key element in determining an individual's migration status. By doing so, individuals may be exposed to racial profiling practices. However, on the other hand, there is public interest which may justify the use of AI tools, which should be considered when analysing the use of AI in border control Awareness of the risks that the use of AI systems in the area of migration and asylum may pose is also reflected in the EU AI Regulation (EU AI Act), which is currently in the process of being adopted. The AI Act includes a systematic, risk-based approach to determine the greater or lesser obligations of providers and deployers, where the use of AI in the areas of migration, asylum and border control management is classified as a system that poses a high risk to human security and fundamental rights. This poster will analyse to what extent are safeguards as foreseen in the AI Act sufficient to prevent prohibited practice in the border control and migration context.

Keywords: migrations, artificial intelligence, proportionality, discrimination

Maintaining Human Control Over Lethal Autonomous Weapon Systems to Avoid the Violations of Human Rights

Anže Zalaznik, Gašper Csipo, Nal Strajnar and Jasna Nuhanović
Master students, Faculty of Law, University of Ljubljana

There does not exist a common understanding or consensual definition on the notion of lethal autonomous weapons system (LAWS). One of the elements, common to most definitions of LAWS and arguably, the most important one, is the notion of human control. The question that this poster address centres on this notion – focusing in particular on the question of what is the minimum degree of human control that must be exerted over LAWS? It is generally agreed that to avoid violating human rights and international humanitarian law (especially when it comes to taking a human life in the context of an armed conflict), human control over LAWS must be maintained. Such control can be exercised in three different stages:1) at the development stage, especially through technical design and programming of the weapon system; 2) at the point of activation, which involves the decision of the commander or operator to use the AI system for a particular purpose; 3) or during the operation stage, when the weapon autonomously selects and attacks targets. It is argued in the poster that human control over LAWS is necessary, because it is questionable whether LAWS can apply the fundamental principles of international human rights and international humanitarian law such as distinction and proportionality, and cannot be held accountable for the outcomes of the attack. Therefore, according to some scholars, LAWS operating completely outside any human control and a responsible chain of command, are not in conformity with international humanitarian law, which consequently means, such use should be considered as unlawful. It will be explained in the poster that neither international humanitarian law, nor human rights law provide for an answer to what degree of control over LAWS is necessary for their use to be considered lawful. Since autonomous weapons systems are relatively new topic, actors of the international community will have to figure it out, although some guidance was provided for by the Committee on Legal Affairs and Human Rights, which proposed the notions of: “significant” human control, “effective” human control or “appropriate levels of human judgement”. Regardless of this uncertainty, it is argued in this poster that human control must be maintained over LAWS over all stages of their life cycles, otherwise respect of human rights is at serious risk.

Keywords: LAWS, human control, human rights, distinction, responsibility

Artificial Intelligence and the Right to Nationality: Citizenship of Humanoid Robots

Ema Burazer, Jurij Hovnik, Juš Penko, Lea Zahrastnik
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In the rapidly advancing field of artificial intelligence, our research delves into the legal and ethical dimensions of extending the right to nationality onto humanoid robots. Most modern legal acts on human rights enshrine the right to citizenship to humans, however, none have addressed the problem of granting it to non-human entities yet – not even the soon to be adopted AI Act (EU). In 2017 the Saudi Arabian government granted full citizenship to a humanoid robot Sofia. This unprecedented decision shocked the world to say the least, however, even though many have disregarded it as a sci-fi attention-grabbing experiment, in 2023, when technology is developing at a rapid speed and AI gets more sophisticated by the minute, Saudi Arabia's decision might have not been so far off after all. What should a humanoid robot do or be to get citizenship granted? What could the consequences of such an action be? Will it impinge on human rights of people? Should a robot be able to vote? What about marriage? And what even constitutes a robot's identity? etc. These are just a few of the burning questions that arise whilst brainstorming this brand-new topic. Through our research we will address these challenges to the best of our abilities. A possible solution is partial citizenship, entailing a limited range of rights for its recipient that would not threaten the rights of people and categorising robots depending on their level of development. It is crucial, although it may seem dystopian and still far away, that this field is thoroughly discussed on an international level and with great caution, since the consequences of a decision on this topic might have a larger impact than it may seem.

Keywords: humanoid robot, the right to nationality, granting citizenship, the right to vote, identity

Should there be Greater Age Limits on the Use of (AI) Applications?

Ema Kolmanko
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More and more children and teenagers are using social networks, furthermore, statistics show that around a third of all online users are children. Children are interacting with AI technologies in many different ways. Impact of these technologies on children's lives is profound. The AI could for example be using natural language processing to understand words and instructions. Therefore it is collecting a lot of data from children, including intimate conversations, and that data is being stored in the cloud, often on commercial servers.

What is the protection for children in such interactions, are there any age limits for the use of (AI) applications? On one hand, for example, we have the right of the child to express themselves (Article 13 of the Convention on the Rights of the Child); the right of the child to the freedom of thought (Article 14 of the Convention on the Rights of the Child) and, on the other hand, we have right, that all actions concerning children by institutions, should be in the best interests of the child (Article 3 of the Convention of the Rights of the Child); the right to privacy, and non-interference in child's personal life, family, home or correspondence (Article 16 of the Convention on the Rights of the Child). However, this existing legal framework is insufficient, therefore, Unesco's team at The Alan Turing Institute has been working in collaboration with the Council of Europe's Steering Committee for the Rights of the Child (CDENF) to conduct a mapping study to assess the need for legally binding frameworks for AI specifically used by children or for systems that affect children up to the age of 18.

And what is the role of parents? The author asks the question of whether there should also be any restrictions here or at least some legally accepted recommendations concerning parents.

Keywords: AI, child, children rights, applications, age limit

How Can AI Help Predicting Natural Disasters

Ema Plut
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Artificial Intelligence (AI) is playing a crucial role in dealing with natural disasters. This paper explores how AI helps prevent disasters, focusing on early detection, forecasting, and response. By using AI to study large sets of data, we get better insights into disasters like earthquakes, wildfires, floods, and landslides. The paper looks into how AI is currently used to predict disasters, highlighting improvements in accuracy and response time. It also discusses how AI helps in making proactive decisions and assessing risks to lessen the impact of disasters. While AI shows great promise, there are challenges to consider. Keeping data safe and private is a big concern, emphasizing the need to protect sensitive information. Another important aspect is addressing bias in AI algorithms to ensure fair and just disaster predictions and responses. Making sure that everyone, no matter their background, can access the benefits of AI is also a challenge. Additionally, being accountable and making responsible decisions with AI is crucial, emphasizing the importance of transparent and ethical practices. In summary, this paper looks into how AI is actively helping prevent natural disasters and dealing with challenges tied to its use. It emphasizes the need to balance technological advancements with ethical considerations for the effective and responsible use of AI in disaster management.

Keywords: Artificial Intelligence, Natural Disasters, Early Detection, Forecasting, Data Privacy, Bias, Accountability

Freedom of Thought as a Basis for Long-term AI Safety and Regulation

Jan Hořeňovský
Faculty of Law, Charles University

If autonomous AI systems are to be reliably safe in novel situations, they will need to incorporate general principles guiding them to recognize and avoid harmful behaviors. Such principles may need to be supported by a binding system of regulation, which would need the underlying principles to be widely accepted. They should also be specific enough for technical implementation. Drawing inspiration from the legal domain, my contribution will explain how freedom of thought could be one of such principles and serve as a foundation both for an international regulatory system and for building technical safety constraints for future AI systems. The presentation would be based on a previously published paper, but limited to freedom of thought examples. In my contribution, I will suggest freedom of thought to include the right to mental security, including a right not to be lied to by AI systems. I will also show some concrete examples of how this right concerning AI systems can protect us against both contemporary and long-term AI manipulation. The proposal offers a shift in understanding human rights, which have been historically seen within human rights law, mainly as protecting citizens against the state, while the proposal is extending them to protect against actions taken by AI. In some, mainly European, jurisdictions, the horizontal effect of constitutional human rights already enables their direct application to non-state actors as duty bearers. In line with this practice, an extension to AI is natural and arises from the increasing need to protect humans from potentially powerful autonomous machines.

Keywords: AI systems; freedom of thought; horizontal effect; right not to be manipulated; negative human rights; international regulation

AI in Outer Space and its Impact on the Right to a Healthy Environment

Ema Bohinc, Katarina Čepon and Kaja Franko
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Artificial Intelligence (AI) has shown many positive effects in protecting human rights and discovering their violations. This poster will focus on how AI in space affects our right to a healthy environment, which the United Nations General Assembly recognised as a human right in the resolution 76/300 (2022). In particular, the focus will be on the positive effects that the use of the AI in space may have in protecting and fulfilling this right. The rapid increase of private enterprises in space means more satellites, more space missions and more ''space tourism'' flights. Subsequently there exists an increased possibility of collisions and space debris, which could impact a number of human rights, including the right to a healthy environment. Although most debris burn up in the atmosphere, larger debris objects can reach the ground intact and potentially cause damage on Earth. Burning up in the atmosphere contributes to air pollution as well. Considering how important satellites are in today's interconnected world, we have to make space a safer place for future generations. Luckily, AI systems for avoiding satellite collisions are extremely effective and will be even more crucial as the number of space objects increases. With many satellites orbiting the Earth, space agencies worldwide, for example European Space Agency's (ESA) Space Debris Office, regularly conduct debris avoidance manoeuvres with their teams of experts being on call 24/7 for several days in order to prevent collisions. These manoeuvres take a lot of preparation and money. With AI's help, such manoeuvres could be completed more efficiently, with less human impact and arguably even with greater success. Moreover, AI does not only have a potential as a preventative mechanism, but it can also help remove ''space junk'' after it occurs. For example, ESA's ClearSPace-1 mission that showed promising effectiveness and precision is planned to be launched in 2026.

Keywords: Artificial Intelligence, Space Debris, Right to a Healthy Environment, Space Safety, Collision Avoidance

Autonomous Weapons in Relation to the Principle of Distinction Under International Humanitarian Law and the Principle of Non- Discrimination under International Human Rights Law

Lara Koselj, Žana Lapajne and Anej Ogrizek
Master students, Faculty of Law, University of Ljubljana

Lethal autonomous weapons systems are weapons systems that use artificial intelligence (AI) to identify, select, and kill human targets without human intervention. Although the international law by itself does not prohibit the use of autonomous weapons in armed conflicts, their use must, nonetheless, comply with the requirements of international law, namely International Humanitarian Law (IHL) and International Human Rights Law (IHRL). Firstly, fully autonomous weapons face significant obstacles in complying with the principles of distinction and proportionality as set by IHL. Autonomous weapons systems, on the one hand, lack the human judgment necessary to distinguish between legitimate military targets and protected objects and civilians, posing a risk of an indiscriminate attack, which could potentially violate fundamental principles of IHL. Secondly, fully autonomous weapons systems may pose a threat to the principle of non-discrimination as a fundamental rule of IHRL. Selecting individuals to kill based on sensor data alone, especially through facial recognition or other biometric information, introduces substantial risks for the selective targeting of groups based on perceived age, gender, race, ethnicity, or religious dress. The aim of this poster is to examine the existing international legal framework currently governing the employment of autonomous weapons, specifically the aspects relating to its ability to differentiate, distinguish and non-discriminate.

Keywords: autonomous weapons, principle of distinction, non-discrimination, humanitarian law, human rights.

Artificial Intelligence and Freedom of Expression: The Council of Europe Perspective

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While artificial intelligence (AI) has many positive effects on society, there are growing concerns about the impact of its rapid development on human rights, with freedom of expression at the forefront. Article 10 of the Convention for the Protection of Human Rights and Fundamental Freedoms enshrines the right to freedom of expression and is of fundamental importance as a cornerstone of the activities of the media and the rights of the audience. The emergence of AI poses challenges to this right, including biases in content moderation, misinformation, and AI-driven surveillance restricting free speech. The Council of Europe, an international organization mandated with standard-setting in the human rights field, is working on development of norms adapted to new challenges, including AI. To this end, the Council of Ministers established the Steering Committee on Media and Information Society (CDMSI) to guide the work of the Council of Europe in the areas of freedom of expression, media, internet governance and other information society-related issues, as well as to oversee work in the field of data protection. The CDMSI, composed of experts in the fields of freedom of expression, media, journalists' safety, and digital governance, deals with a series of questions regarding the challenges AI poses to safeguarding human rights. Main concerns include the creation of echo chambers, increased polarization, and biases in content visibility, which threaten media pluralism and social cohesion. Automated content removal by social media platforms raises issues of legality, legitimacy, and proportionality, often lacking transparency and due process. These practices may lead to over-blocking of legal content, compromising public debate and the diversity of information. Additionally, initiatives to counter hate speech and extremism through automated techniques risk excessive interference with freedom of expression and place undue monitoring burdens on intermediaries. The growing dissemination of misinformation, particularly on social media, further exacerbates these challenges, highlighting the need for careful regulation to balance security and freedom of expression. These problems will be presented in more detail in our poster presentation, along with the solutions already adopted by the Council of Europe to guarantee freedom of expression considering these challenges.

Keywords: freedom of expression, artificial intelligence, Council of Europe, governance, media, regulation

Effective Regulation of AI Requires Clear Boundaries between Law and Ethics

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The author argues that the rush to regulate AI does not in itself guarantee the protection of human rights if there is no clarity on the relationship between legal and ethical rules, a well-defined governance of AI and an ex-ante verification of any new national regulations on the subject. The globalisation of the economic system exposes individual countries to strong asymmetries in the costs and benefits of regulating AI applications. For this reason, the EU, with its soon to be adopted regulation and its rights-based model, is set to play a driving and guiding role also outside the EU (the so-called 'Brussels effect'), as it did with the GDPR. As Tim Wu of Columbia University notes, a massive transfer of social trust is taking place: from institutions to technology, which must be regulated with great caution. The rise of robots that are difficult to distinguish from people puts us in uncharted territory, so we need to ensure that AI systems are reliable, explainable, traceable, transparent and inclusive. The author believes that the solution lies in a combination of public intervention, deontological rules of private companies, and the behaviour of individuals. There are several possible approaches in this regard.W hile in the EU, the Charter of Fundamental Rights, but especially the proposed AI regulation and the Digital Services Act (DSA) introduce a number of detailed provisions, in the US, the National Institute of Standards and Technology has proposed guidance to companies on the design and use of chatboxes, and the Blueprint for an AI Bill of Rights (AIBoR) was presented on 4 October 2022. These frameworks have in common that they establish the right of individuals to be protected from AI systems and to be informed about algorithmic decisions that affect them, but by different means. Large technology companies, fearing a blanket ban, in the face of the vast documentation of unfair and erroneous outcomes of decisions based on such systems have responded by proposing the 'ethics of artificial intelligence', with the aim of making a regime of mere self-regulation plausible. On the contrary, the author believes that the real guarantee for the citizen consists of legal rules whose non-observance is followed by a sanction, which self-regulation can complement but not replace. In the field of AI research, however, the legal dimension alone is insufficient to guide and establish its boundaries. We are in fact in the presence of diffuse interests belonging to an undifferentiated collectivity, such as those of future generations. It is difficult for research to use legal norms to guide behaviour whose negative consequences are neither certain nor determinable, and which therefore do not permit a judgement of value or disvalue proper to the legal norm. This is where ethics comes into play. It is up to the conscience of researchers, as individuals and as a community, to decide what to do research on, and how to do it. Everything else is a matter for legislators and regulators

Keywords: artificial intelligence, regulations, ethics, human rights

AI Technologies in the Framework of Asylum and Refugee Law: A Threat or an Opportunity?

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The poster will first examine in which areas of migration surveillance and migrants handling the AI is currently being used, with interest in both, good and bad practices. The authors will focus primarily on forced migrations, rather than voluntary ones. The next area of interest will be how, if at all, the use of AI is regulated in the current legal framework. The last, but absolutely not the least, the poster will examine the possible human rights violations of such use of AI, especially in regard to data protection, mass influx border control, the non-refoulement principle, and the right to asylum. Making migration flows more manageable and predictable in order to ensure human rights are fully respected, may be a sufficient and legitimate basis to use AI even though such tools might not be seen as inherently democratic. Nevertheless, there is a wide range of risks that need to be thoughtfully taken into consideration when putting AI-ran tools into practice.

Keywords: AI, asylum law, refugee law, border control, data protection, non-refoulement principle

AI and the Right to Health: Explainability at the Center of the Debate

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Article 25 of the Universal Declaration of Human Rights states that the right to health and well-being depends on several factors, including medical care. The third of the United Nations' Sustainable Development Goals, in turn, makes it clear that achieving universal health coverage is only possible with access to quality essential healthcare services. In front of that, the article discusses how Artificial Intelligence (AI) systems can facilitate access to such services and improve their quality. It argues that the ability of AI algorithms to recognise patterns in large volumes of data can improve strategic areas of healthcare, thus contributing to the promotion of health and well-being of the population. It points out, however, that the realisation of this potential depends on the willingness and preparation of professionals at the point of care to use the technology in question, which poses the following question: What factors can encourage and discourage health professionals' adoption of AI technologies at the point of care? Based on a literature review, the article presents two conclusions: (1) explainability is central in discussing using AI systems in healthcare; (2) it lacks knowledge on how different AI and healthcare stakeholders could coordinate to promote trust in these systems.

Keywords: Artificial Intelligence, Explainability, Human Rights, Healthcare, Clinical Practice, Ethics, Regulation

Artificial Intelligence (AI) and Right to Protest

Sara Gorinjac and Eva Jagodič
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This poster will analyse the use of Artificial Intelligence (AI) for the protection of the right to protest. The poster will provide information on both negative (such as the implementation of surveillance technologies, which might have a chilling effect on protests, or use of AI to track and profile individuals linked to certain beliefs or actions) and positive aspects of AI regarding protests (for example a protest can be held online, or protesters can attend live protests via Skype). The focus will be on the right to protest in the online context, examining in particular AI's influence on content moderation and how content is shown on online platforms with the use of AI. With new technologies, which may impact the right to protest, international legal standards are needed to prevent the restriction of fundamental human rights, especially given the current lack of safeguards in laws and policies regulating AI. Therefore, the poster will outline essential legal standards that will have to be implemented to safeguard the right to peaceful protest in the modern AI-driven world.

Keywords: right to protest, artificial intelligence, surveillance, content moderation, content shown

Issues of Fundamental Rights in the AI Act

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The aim of this poster is to analyze the specific regulation of fundamental rights in the proposed EU regulation of artificial intelligence (AI), i.e. the AI Act. The Final Draft of the AI Act describes the document as 'human centric' and having high regard for fundamental rights. The main risks to human rights are presented by the unpredictability and autonomous behaviour of certain AI systems – the Act aims at synchronizing them with the goal of fundamental rights preservation. The Commission's specific objectives emphasize care for the human rights aspect of AI regulation, namely ensuring consistency with existing law and enabling its effective enforcement. As follows from preparatory documentation, respect for human rights within the AI Act is established by ensuring consistency of the document with the EU Charter of Fundamental Rights (hereinafter: the Charter) and existing secondary legislation on data protection, consumer protection, non-discrimination and gender equality while also complementing existing non-discrimination instruments. The issue arising in connection with the AI Act is its seemingly horizontal application of fundamental rights enshrined in the Charter in the area of AI. According to the explanatory memorandum fundamental rights, which may be at risk due to AI activity, include the right to human dignity, respect for private life and protection of personal data, non-discrimination, and equality between women and men, as well as the rights to freedom of expression and freedom of assembly. The AI Act follows a risk-based approach, differentiating between uses of AI that pose 1. an unacceptable risk, 2. high risk, and 3. low or minimal risk. Article 7 of the AI Act intrinsically links this approach risk assessment system to the notion of fundamental rights in order to prevent their possible violation. This assessment is to be conducted by the Commission in consideration of the conditions enumerated therein by the European Legislator, i. a. the extent and gravity of the harm already caused to fundamental rights and of the potential future harm.

Keywords: AI Act, fundamental rights, human rights, EU Charter of Fundamental Rights, high-risk systems, unification of EU law

The Impact of AI on the Progressive Realization of Economic and Social Rights

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The paper discusses the impact of artificial intelligence on the State's responsibility regarding the progressive realization of economic and social rights, which is the State`s obligation under the International Covenant on Economic, Social, and Cultural Rights. The emergence of artificial intelligence presents both challenges and opportunities for the progressive realization of human rights. The interplay between artificial intelligence and human rights can be observed at four levels: designing, developing, deploying, and using artificial intelligence. The goal at all levels is to facilitate the State's efforts to improve access and the timeframe to achieve rights, making them more effective. While concerns are discriminatory intent when designing; one-way focused developing algorithm (such as economic, social, or political, while ignoring established human rights principles); deployment of outcomes that are not considering other human rights (i.e. not weighting adequately between different rights); and either the extensive use of artificial intelligence, which raises the possibility of concentrating legislative, executive, and judicial powers in one system, or exaggeratedly limited use of artificial intelligence, thus applying the same outcomes to many incomparable situations. To minimize these concerns, a transparent system should be in place to make outcomes of artificial intelligence predictable and consistent with the established legal order. However, such a system may delay the progressive realization of economic and social rights and interfere with other human rights, potentially rendering it ineffective. Although there are many challenges to consider, States must be aware that artificial intelligence is a new reality. To ensure that its use does not lead to retrogressive measures regarding the realization of economic and social rights, it is crucial to approach artificial intelligence through the lens of established human rights principles. Nonetheless, some challenges posed by artificial intelligence are not new, as they are already present in human decision-making processes.

Keywords: artificial intelligence, economic and social rights, progressive realization, discrimination, decision-making, responsibility

Seconds before the AI Big Bang

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The fundamental issue of AI lies in its automated mechanism capable of virtually bypassing and undermining Human Rights laws, the universal and internationally protected code of government obligations. This unprecedented issue widens the frame of human rights and brings critical attention to the rights of nature and life as a whole. The interdisciplinary approach of the author explores multiple perspectives of life altering human technology that endangers nature. The fundamental change proposed requires the realization of the rights of all living systems, including plants, fungi, and all life that is not a product of the mechanized and automated self-absorbing mutation undermining the basic functions of life. The analysis highlights precursive factors of this automated mechanism. At a decisive moment in history, in the constant flow of events, a conference series hosting ten meetings, between 1946 and 1953, created a new lens for humanity. This mechanized lens was the product of the invitation-only Macy Conferences, during wartime urgency. A primary goal of these meetings was to establish a shared language between isolated disciplines to study the function of humans, animals, and the machine. The fascinating interdisciplinary discussions were meant to converge research on the functions of life, self-regulation, feedback, communication, and learning. The discussions were funded and organized by Macy Foundation, an institution of medical research with a social mission. The author suggests a critical attention to the early cybernetic vision and 2nd order Cybernetics, what she calls the “The Cybernetic Turn”. It helps us better understand the warnings of the Cybernetic faculty of sight and see the formalized, mechanized, and eventually automatized life functions, compacted into the practical and relatable AI. An ecoCritical turn in Human Rights Law can lead new trajectories away from the effects and threats of unregulatable Cybernetic Governance, by ensuring rights to all life it endangers

Keywords: Macy Conferences, Feral Palace Conference, life-functions, feedback-mechanisms, rights of all living systems, EcoCritical Cybernetics, AI

Using AI for the »hybridisation« of work in the context of the right to work

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The poster is a result of a student research project on the use of AI to reduce the carbon footprint in the Municipality of Ljubljana. One of the options to tackle this issue is to introduce the so-called hybrid work forms, as an atypical sustainability measure. »Hybridisation« of work includes the introduction of a four-day work week and working remotely (from home or satellite offices). By analysing and interpreting the right to work as enshrined in the European Social Charter and other international law documents we researched how Ljubljana could introduce said forms of hybrid work and thus reduce the city's carbon footprint. The impact of hybrid forms of work on net-zero cities is important as they reduce traffic and energy consumption. Working remotely requires an agreement on the place of work, which has an impact on organisation, gives workers more autonomy and makes employer control more difficult. The Slovenian Employment Relations Act (Art. 49) also stipulates that a change of work location, as a key component of the employment contract, requires a new contract. In this project, AI tools were used to show to the Municipality of Ljubljana, that hybridization of the work process could provide several benefits in reducing the city’s carbon footprint. Using large language models, especially ChatGPT-4 and the MyOpenCourt tool, data obtained from the Municipality of Ljubljana were processed and an analysis on the potential benefits and alignments with the city's sustainability goals was prepared. This approach could clearly provide insights to help optimise work schedules and identify the best locations for satellite offices.

Keywords: right to work, hybrid forms of work, remote work, working from home, satellite offices, four-day work week, artificial intelligence, large language models, sustainable development, net-zero cities, city of Ljubljana

Green Parking Lots: Using AI to Ensure the Right to a Healthy Environment

Larisa Omanović, Jaša Potočnik, Ela Manuela Erčulj and Tomaž Terčič
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The poster showcases the results of an interdisciplinary student research project under the NetZeroCities initiative, focusing on the application of AI in modelling green parking lots. The primary objective was to utilize AI to determine the ideal equilibrium between electrification infrastructure and vegetation integration. Two models were created for parking lots in both city outskirts and city centers, with a specific analysis of the Gospodarsko razstavišče and Dolgi Most P+R lots, which currently do not meet green transition standards. The importance of environmental protection has grown amidst climate challenges, highlighting the need for a healthy living environment. Article 72 of the Constitution of the Republic of Slovenia asserts the right to a healthy living environment, with the state being responsible for safeguarding it. While unique to the Slovenian Constitution, this provision holds substantial relevance. Although not explicitly articulated in the European Convention on Human Rights, the European Court of Human Rights encompasses this right within the right to respect for private and family life from Article 8. The correlation between green parking lots, incorporating photovoltaic canopies, electric charging stations, vegetation, and human rights may not be apparent, yet these lots play a big role in air and noise pollution reduction, urban heat island effect mitigation, and green electricity generation. Therefore, in line with many commitments, integrating green parking into urban environments aligns with the goal of ensuring a healthy living environment. Our research using AI tools revealed the critical role of human input due to insufficient statistical data on parking and environmental factors. The scarcity of data disabled the determination of the optimal balance between electrification and vegetation. AI tools were also limited in preparing visual materials for proposals. We conclude that using AI in this context is premature without comprehensive data and standardized methodologies, which would enable algorithm development.

Keywords: Human Rights, Environmental Protection, Green Parking Lots, Artificial Intelligence, NetZeroCities

Digital Agriculture: A New Challenge for Human Rights

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DIGIT-AGRO Asociation for Development of Digital technologies in Agriculture and Horticulture

The increasing use of artificial intelligence (AI) and digitalization in agriculture presents both opportunities and challenges for human rights. On one hand, these technologies have the potential to improve productivity, sustainability, and efficiency in food systems, which could contribute to the realization of the right to food. However, on the other hand, the rapid spread of digital technologies, including the use of AI systems, in agriculture raises concerns about the unequal distribution of benefits which may exacerbate existing inequalities and therefore have a detrimental impact on the rights of small-scale producers, indigenous peoples, and marginalized groups. While digital agriculture promises to enhance food systems' productivity, sustainability, and efficiency, large corporations are likely to be the main beneficiaries of digital transition and the use of AI technologies. Small-scale producers, indigenous peoples, and marginalized groups risk exclusion due to power imbalances as well as the inaccessibility and inability of digital registries to document diverse tenure forms. The digitization of land records is part of a broader "digital agriculture" transformation involving agribusiness-technology company partnerships. However, society's future cannot be left solely to technicians and companies, therefore global initiatives aim to shape digital technologies to support human rights and Food producers' organizations advocate for technologies serving people and the planet, not just financial interests. Governments, civil society, and the private sector must work together to create an enabling environment that promotes equitable access to digital technologies, builds capacity among small-scale producers, and ensures transparency and accountability in the use of agricultural data. Only by putting human rights at the center of the digital transformation in agriculture can we harness the potential of these technologies to build more sustainable, resilient, and inclusive food systems.

Keywords: digital agriculture, human rights, smallholder farmers, land rights, inequality, food justice

AI in Healthcare – Its Benefits and Challenges

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AI has been present in healthcare for a long time, but with the release of ChatGPT, with the ChatGPT-4 version, we have reached a point where contemplating a revolution in the healthcare system is completely realistic. First of all, by using AI in healthcare, significant time and cost savings could be achieved. For example, an ultrasound imaging system could be integrated into an artificial intelligence-assisted robotic arm, enabling complete imaging without the need for a physician. Secondly, the possibility of human error could be reduced. For example, the use of robot arms, which are operated remotely, could detect and remove involuntary hand movement which consequently reduces the risk of tissue damage. Thirdly, AI could help us with labour shortages. Nursing robots can help short-staffed teams and complete many everyday tasks or be of great assistance. In Slovenia, the University Medical Centre Maribor introduced a humanoid robot that takes patients' temperature and blood pressure. On the other hand, there are a number of challenges to implementing AI in healthcare. The first challenge is the lack of high-quality medical data. Medical artificial intelligence systems would require massive amounts of quality health data to determine correct courses of action for different procedures. The second challenge are reliability and transparency. Because of the complexity of AI, a patient might not understand how it operates and might not trust it. As such, nearly all artificial intelligence-assisted medical robots will likely be assisted by physicians throughout the process, at least for the time being. The third issue are the training of healthcare workers and cost required to implement these systems. Automated solutions are a necessity for providing quality healthcare and a collaboration between people and technology is the ultimate answer to the growing challenges in healthcare.

Keywords: AI, healthcare, nursing robots, reliability, transparency

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