Principles for AI: Towards a Humanistic Approach?

A Global Conference

4 March, 2019

UNESCO HQ, Paris, France

International experts agree: Humanity is on the threshold of a new era. Rapid technological advancements in artificial intelligence (AI) – as well as other evolving technologies such as robotics, big data analytics, and the Internet of Things – are changing the way we learn, work and live together. This transformation has already begun and while it affects all aspects of our lives - are we prepared?

Research and applications in the field of AI are advancing at a very rapid pace, whilst the legal, policy and ethical instruments that are needed to guide and shape AI are evolving slowly. How far should a machine's autonomy and its decision-making power be allowed to go? How can we govern AI? Who decides what values and priorities are programmed in the algorithms of machines? If an AI miscalculation results in an accident, who is accountable? What, if anything, is off-limits to AI? These and many other questions remain unanswered today.

Investing in the development of an ethical and human centred AI means that we need to address the challenges and opportunities that AI presents for today, tomorrow and beyond. We must equip current and future generations with the necessary tools to harness AI for sustainable development and ensure that it operates based on human rights, a shared set of values and ethics for the benefit of all humanity. It is widely recognized that AI has enormous potential for developing knowledge societies, for social good and accelerating human progress. AI can help address many of humanity's most critical issues: including those related to education, the sciences, culture, media, access to information, gender equality, poverty alleviation and climate change. Yet these major opportunities that AI offers can only be unleashed, if it is developed with respect to universal norms and standards, and if it is anchored in peace and humanism, focused on achieving sustainable development.

In response to the major transformations of our societies due to AI, UNESCO - as a global laboratory of ideas, standard setter, policy advisor and capacity builder - will play a leading role in facilitating international cooperation and shaping its future. UNESCO's mandate calls inherently for a human-centred approach to AI; to shift the conversation to include AI's role in addressing current inequalities regarding access to knowledge, research and the diversity of cultural expressions and to ensure AI does not widen the technological divides within and between countries. The promise of "AI for all" must be that everyone can take advantage of the technological revolution under way and access its fruits, notably in terms of innovation and knowledge.

Building on its record of multi-stakeholder consultation and consensus building, UNESCO will bring together stakeholders from the public and private sector, technical community, media and academia, civil society and international organizations. The conference will facilitate dialogue between stakeholder groups on the potential benefits and challenges of AI and its applications. Discussions will focus on the universal aspects of AI, its ethical dimensions, and ways to ensure human-centred and ethical design of AI principles and frameworks rooted in international cooperation.

4 March 2019

*panelists in alphabetical order

Time	Event
	Masters of Ceremony: The Havens Family
9:30-10:00	**Opening Session** • Audrey Azoulay**,** Director General, UNESCO **Setting the Scene: demystifying AI** • Tapiwa Chiwewe, Research Manager, IBM Research Africa
10:00-10:10	**The Havens Family, Family of the Future: AI in Everyday Life**
10:10-10:25	**Keynote 1:** Cédric Villani, Deputy, National Assembly, AI Specialist, Fields Medal winner 2010, French Republic
10:30-11:45	**Plenary Session 1: Challenges and Opportunities of AI** The development of artificial intelligence offers both opportunities and challenges as it concerns the global goals for sustainable development. What are some of the main challenges and opportunities in ensuring the development of artificial intelligence that serves humanity? How can AI contribute concretely to sustainable development? How can AI potentially both increase and fight biases, notably in the domain of gender equality, discrimination, and narrowing the digital divides? Are there good practices in public policy development at the national level in the field of AI and if so, what are they? **Moderator:** Cathy Mulligan, Visiting Research Fellow, Centre for Cryptocurrency, Imperial College, United Kingdom **Panelists:** 1. Bunmi Banjo, Managing Director, Kuvora Inc. 2. Omar Bin Sultan Al Olama, Minister of State for Artificial Intelligence, United Arab Emirates 3. Nicolas Economou, Founder & CEO, H5, Chair, Law Committee for the IEEE Global Initiative on Ethics of Autonomous & Intelligent Systems 4. Mariya Gabriel, European Commissioner for Digital Economy and Society, European Commission 5. Seng Yee Lau, Senior Executive Vice President, Tencent 6. Marija Manojlovic, Strategy, Data and Innovation Advisor at The Global Partnership to End Violence Against Children 7. Luis Enrique Sucar, Senior Research Scientist, Instituto Nacional de Astrofísica, Óptica y Electrónica, Mexico
11:45-13:00	**Plenary Session 2: The Universality of AI?** The development of artificial intelligence directly impacts all domains of UNESCO's mandate. Teaching tools, ways of learning, access to knowledge, and teacher training

	will be revolutionized. The question of what skills to develop in order to evolve in an increasingly automated world will become more and more central. AI is changing the way we think about heritage reconstruction, and contemporary creative production. Environmental programmes and underwater research are being transformed by AI-driven technologies, and the ethical dimensions of artificial intelligence are at the heart of preoccupations of governments and everyday citizens. Communication and information are being directly impacted by advances in AI, through the development of algorithms and evolutions in access to information and media production. What does universality, a fully inclusive approach, mean in AI, and what could it look like? Why is universality in AI, both in terms of geography and stakeholders, important? How do we govern AI, and who does what in a multi-stakeholder approach? What are the key factors for a sound enabling environment for AI? **Moderator:** Andrés Roemer, UNESCO Goodwill Ambassador for Social Change and the Free Flow of Knowledge, writer, philanthropist, human rights activist. **Ensuring a Global Approach:** 1. Abdoulaye Baniré Diallo, Professor, Université du Québec à Montréal, Chief scientist and Co-founder, My Intelligent Machine, Canada 2. Anriette Esterhuysen, Senior Advisor on Internet Governance, policy advocacy and strategic planning, Association for Progressive Communications (APC) 3. Miguel Luengo-Oroz, Chief Data Scientist, UN Global Pulse 4. Joe Mucheru, Cabinet Secretary in the Ministry of Information and Communications, Republic of Kenya **Ensuring a Multi-stakeholder Approach:** 5. Katsumi Emura, Chief Technology Officer, NEC 6. Boutheina Guermazi, Director of Digital Development, Infrastructure practice group, World Bank Group 7. Nicolas Miailhe, Co-Founder and President, The Future Society 8. Jernej Pikalo, Minister of Education, Science and Sport, Republic of Slovenia 9. Francois Taddei, Director of the Center for Interdisciplinary Research, French Republic
13:00-14:30	**Lunch**
14:30-15:00	**Keynote 2:** Nanjira Sambuli, Senior Policy Manager, World Wide Web Foundation, and Philip Dawson, Lead Public Policy, Element AI
15:00-16:15	**Plenary Session 3: Towards a Human-Centred Ethical AI?** If we are to make the most of the possibilities offered by AI to the world, we must ensure that it serves humanity, with respect for human rights and human dignity, as well as our environment and ecosystems. Today, no global ethical framework or principles for AI developments and applications exist. UNESCO is, a unique universal forum with over twenty years of experience in developing international instruments related to bioethics and the ethics of science and technology. It has the responsibility to lead an interdisciplinary, pluralistic, universal, and enlightened debate – not a technical debate, but an ethical one – in order to enter this new era with our eyes wide open, without sacrificing our values, and to make it possible to establish a common global foundation of ethical principles. What do we mean exactly by a human centred and ethical AI? What are the immediate and potential long-term ethical challenges raised by AI in the domains of UNESCO's

| | mandate? What are some of the challenges in establishing ethical frameworks and principles in this field? Does this definition change in different regions of the world? What is a possible way forward and who needs to be involved in the conversation?

Moderator: John Shawe-Taylor, UNESCO Chair in AI, Professor of Computational Statistics and Machine Learning, University College London, United Kingdom

Introductory remarks: Sang Wook Yi, Philosophy professor, Hanyang University, Republic of Korea, Member, World Commission on the Ethics of Scientific Knowledge and Technology, UNESCO

Panelists:
1. Bernd Carsten Stahl, Professor of Critical Research in Technology, Director of the Center for Computing and Social Responsibility, De Montfort University, United Kingdom
2. Dorothy Gordon, Chair, Information For All Programme, UNESCO
3. Edson Prestes, Institute of Informatics, Federal University of Rio Grande do Sul, Brazil
4. Emma Ruttkamp-Bloem, Professor in Philosophy of Science, University of Pretoria, Leader of Ethics, AI research group, Centre for Artificial Intelligence Research Republic of South Africa
5. Osamu Sudo, Professor, University of Tokyo, Chair, Council for Social Principles of Human-Centric AI, Japan
6. Sang Wook Yi, Philosophy professor, Hanyang University, Republic of Korea, Member, World Commission on the Ethics of Scientific Knowledge and Technology, UNESCO
7. Lan Xue, Dean of Schwarzman College, Tsinghua University, People's Republic of China |
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| 16:15-16:30 | **Coffee Break** |
| 16:30-16:45 | **Keynote 3:** Terah Lyons, Executive Director, Partnership on AI |
| 16:45-18:00 | **Plenary session 4: New Architectures of International Cooperation on AI**

UNESCO, as a standard setter and laboratory of ideas, has a role to play in shaping international debate on the future of AI and its governance; its multidisciplinary mandate positions the Organization to address the ethical and social implications of AI and promote its development that takes into consideration human-centred values.

How can multilateral cooperation on AI be ensured between relevant international, regional, and national bodies so that we are not reinventing the wheel as it concerns the development of norms and standards in this domain? What strategies, frameworks, and principles have been developed at the national or regional level in relation to AI and human-centred values? What remains to be done and what is the role of UNESCO?

Moderator: Students from Sciences Po Paris School of International Affairs Class "Governing the Rise of AI: A Global Perspective"

Panelists:

1. Houlin Zhao, Secretary-General, International Telecommunications Union
2. Amandeep Singh Gill, Executive Director, Secretariat of the High-level Panel on Digital Cooperation (ex officio)
3. Ulrik Vestergaard Knudsen, Deputy Secretary-General, OECD
4. Gabriella Battaini-Dragoni, Deputy Secretary-General, Council of Europe
5. Fabrizio Hochschild Drummond, Assistant Secretary-General for Strategic Coordination, Executive office of the Secretary-General of the United Nations |

	6. Roberto Viola, Director-General of the EU Directorate-General for Communications Networks, Content and Technology, European Commission 7. Jean-Claude Kassi Brou, President, Economic Community of West African States (ECOWAS) 8. UNESCO
18:00-19:00	**Setting the Foundation for a Humanistic Approach to AI: A Way Forward Ministerial Round Table** **Moderator:** Jean-Michel Jarre, UNESCO Goodwill Ambassador, French composer, performer, and record producer Ministerial interventions **Closing remarks**
19:00-20:00	**Cocktail**