

[IEEE Transactions on Artificial Intelligence](#)

Special Issue Artificial Intelligence Ethics: Technical Solutions and Data-driven Guidelines Call for Papers

Background

Artificial intelligence – and specifically the ethics around its development and application – has become a contentious issue and the subject of intense political, regulatory and societal debate. From decisions about bank loans through the use of automated facial recognition in surveillance, AI systems affect the day-to-day lives of people – often without their knowledge. Over the past few years, governments, NGOs and businesses have published a plethora of principles and guidelines and frameworks around the ethics of AI. Common AI themes include promoting benefits, mitigating potential harms, improving our power to decide, supporting justice and assuring explainability and responsible design (transparency and accountability). But despite these common themes, the development of good practice in AI ethics remains highly fragmented; in the absence of regulation or legislation, organizations are typically left to adopt, interpret and implement ethics practices for themselves and there is little or no independent auditing or scrutiny of either practices or outcomes. Meanwhile, AI development and adoption races ahead, the questions, concerns and priorities of wider and disenfranchised publics remain unheard and in the current climate there is a high risk that ethics gets “left behind.”

Scope

This special issue focuses on novel technical contributions on AI Ethics (including fairness, explainability, risk, accountability and responsibility). We will also consider novel research in the field of data-driven guidelines and recommendations on responsible AI policies, standards, and methodologies; social science studies and recommendations related to the impact of AI on society, as well as surveys of the state-of-the-art in the space of AI ethics. For more information see <https://www.cs.rpi.edu/~xial/IEEE-TAI21-AIEthics/>

The topics of this special issue include but are not limited to:

- Empirical research into the ethical impacts of AI systems, including but not limited to impacts of AI on human workforce and distribution of wealth, data privacy, business, economics or manufacturing and politics, human cognition and social relatedness, and security
- Applications of AI and the potential ethical/social benefits and risks
- Technical research into the representation, acquisition, and use of ethical knowledge by AI systems.
- Technical research into solutions for AI, such as bias, fairness, explainability, accountability, responsibility, risk
- Data-driven guidelines and recommendations, standard developments.
- Self-Regulation of AI systems

Important Dates

- Call for Papers published: April 2021
- Submission due date: 31st July 2021
- First round of review: 1st October 2021
- Author revision: 29th October 2021
- Second round of review: 4th January 2022
- Final version: 4th February 2022

Manuscript Submission

Submit your manuscript at the [IEEE TAI](#), Manuscript Central website at <https://mc.manuscriptcentral.com/tai-ieee>
Potential authors should consult the Information to Authors Document at <https://cis.ieee.org/publications/ieee-transactions-on-artificial-intelligence/information-for-authors-tai>

Guest Editors

[Francesca Rossi](#) - T.J. Watson IBM Research Lab, USA. Contact: Francesca.Rossi2@ibm.com

[Keeley Crockett](#) - Manchester Metropolitan University, UK, Contact: K.crockett@mmu.ac.uk

[Lirong Xia](#) - Rensselaer Polytechnic Institute (RPI), USA, Contact: xialirong@gmail.com

[Matt Garratt](#) -, UNSW Canberra, Australia, Contact: m.garratt@adfa.edu.au