Preface to the Proceedings of TRUST-AI 2025 – the European Workshop on Trustworthy AI

1. Introduction

As artificial intelligence continues to shape society, the need for trustworthy AI has never been more pressing. Trustworthy AI is also increasingly tied to ethical and legal aspects of AI, as reflected in the European AI Act.

TRUST-AI 2025 is a European workshop dedicated to fostering reflection and exchange on trustworthiness in AI, bringing together researchers and practitioners to discuss real-world applications, challenges, and methodologies.

The workshop is organized as part of the European Conference on Artificial Intelligence 2025 – ECAI 2025, in Bologna, Italy, on October 25-26, 2025.

While frameworks for trustworthy AI are rapidly evolving, and trustworthiness requirements for AI are increasingly detailed in guidelines and legislation, it is necessary to establish common understanding and insight into how to realize trustworthy AI in specific business or sociotechnical contexts. In the workshop, we address trustworthy AI from a human-centred perspective over the lifetime of the AI system.

The TRUST-AI workshop has seen substantial interest at ECAI 2025, with more than 150 conference participants expressing an interest in the workshop and 60 papers submitted. This interest indicates the current importance and relevance of research into trustworthy AI.

2. Paper Invitation, Review, and Revision

The TRUST-AI call for papers was openly distributed through the communication channels of the ECAI 2025 conference, the networks of the TRUST-AI organizers, and to relevant email lists and networks.

Authors were invited to make two types of submissions: short papers and position papers. The short paper category should include theoretical contributions, case experiences, or findings from empirical studies and has an indicative max. length of 9 pages excl. references. Position papers should be shorter contributions, presenting a specific position or open questions in need of reflection or discussion. Only accepted short papers are included in these proceedings. Accepted position papers are published on the workshop website and in a separate position paper report.

In total 60 papers were submitted to the workshop, of these 49 short papers. Following an initial editorial check for relevance, the papers were submitted to peer review. All papers submitted to peer review received feedback from three independent reviewers, organized in the Easychair editorial system. A single blind review process was applied. The review process for each paper was led by a lead reviewer from among the workshop organizers – each organizer leading the review process for 9-10 papers with one organizer taking the role of overseeing the process. Following peer review, decisions for each paper were made in an organizer review meeting.

Following review, papers could be accepted directly or conditional to revision. Seven short papers included in these proceedings were accepted directly, 15 were accepted following minor revision, and 15 following major revision. Revisions were checked by at least two organizers to assess adherence to reviewer feedback. All but two conditionally accepted papers were finally accepted following a first revision. The latter two were finally accepted following a second revision.

3. Workshop Program

The program of TRUST-AI 2025 included five sessions for plenary presentations of short papers

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and two sessions for poster presentations of short and position papers. In addition, the program included a groupwork on future research challenges in the field of trustworthy AI.

The plenary sessions were structured according to five thematic sessions: (1) fairness, diversity, and bias-mitigation, (2) enhancing AI trustworthiness, (3) trust in socio-technical AI systems, (4) measurement and assessment of trustworthy AI, and (5) AI compliance and explainability.

For the purposes of these proceedings, the short papers presented in the two poster sessions are structured under the following three thematic headings: (6) enhancing performance and integrity, (7) reliability and integrity, and (8) philosophical and societal considerations.

Overall, the program covers the breadth of research within the field of trustworthy AI, and serves as a good basis for sharing and discussions during and following the workshop. As such, the workshop proceedings contributes to advancing this important research field.

4. Organizers and Reviewers

The organization of TRUST-AI 2025 is based in a Horizon Europe research and innovation action THEMIS 5.0 – Human-centered Trustworthiness Optimisation in Hybrid Decision Support. The workshop organizers represent seven technology research organizations, all contributing to advancing the state of the art on technology and knowledge in support of trustworthy AI. The organizers' responsibilities included the chairing of the workshop, the peer review process, and these proceedings. The organizers were:

- Asbjørn Følstad, SINTEF, Norway
- Dimitris Apostolou, ICCS & University of Piraeus, Greece
- Steve Taylor, University of Southampton, UK
- Andrea Palumbo, KU Leuven, Belgium
- Eleni Tsalapati, ATC, Greece
- Giannis Stamatellos, Institute of Philosophy & Technology, Greece
- Rosario Catelli, Engineering, Italy

The peer review process was made possible through the involvement of 49 peers recruited from the networks and organizations of the organizers and from the authors of submitted papers. Each peer reviewed 1-3 papers.

- Abdullah Elbi, KU Leuven, Belgium
- Agnese Chiatti, Politecnico di Milano, Italy
- Alessandro Antonucci , IDSIA, Switzerland
- Alexandru Mateescu, Université Paris 1 Panthéon-Sorbonne, France
- Aneela Nasim, Università degli Studi di Milano, Italy
- Anthony Fisher, Gonzaga University, USA
- Astik Samal, Maggioli Research and Development, Italy
- Bernd Beckert, Fraunhofer ISI, Germany
- Brian Elvesæter, SINTEF, Norway
- Daniel Bethell, University of York, UK
- Daan Di Scala, TNO, Netherlands
- Elizabeth Darnell, Technological University Dublin, Ireland
- Enzo Dunayevich, University of Tsukuba, Japan
- Ettore Carbone, Ca' Foscari University of Venice, Italy
- Evangelia Anagnostopoulou, NTUA, ICCS, Greece
- Fabio Celli, Maggioli Research and Development, Italy
- Fatemeh Mohammadi, University of Milan, Italy
- Gautam Datla, Strategic Education Inc., USA

- Ibomoiye Domor Mienye, University of Johannesburg, South Africa
- Ilaria Vascotto, University of Trieste, Italy
- Ilias Driouich, AMADEUS France, France
- Ilias Kanellos, ATC – Athens Technology Center, Greece
- Jacopo Morelli, University of Modena-Reggio Emilia, Italy
- Jerome Guzzi, IDSIA (USI-SUPSI), Switzerland
- Joel Bjervig, SINTEF, Norway
- Jules Soria, CEA, France
- Koffi Ismael Ouattara, Huawei MRC, France
- Laurens Devos, KU Leuven, Belgium
- Lennard Helmer, Fraunhofer IAIS, Germany
- Leonie Louisa Etzold, German Aerospace Center, Germany
- Mahboubehsadat Jazayeri, University of Milan, Italy
- Manuel Fernando Silva Rodrigues, University of Minho, Portugal
- María J. Villalobos Quesada, National eHealth Living Lab, Leiden University Medical Centre, Netherlands
- Marina Tropmann-Frick, Hamburg University of Applied Sciences, Germany
- Martin Krutský, Czech Technical University, Czech Rep.
- Michael Farayola, Dublin City University, Ireland
- Nicola Bena, Università degli Studi di Milano, Italy
- Nikolaos Antonios Grammatikos, University of Pireus, Greece
- Paolo Ceravolo, University of Milan, Italy
- Paolo Falcarin, Ca' Foscari University of Venice, Italy
- Priyabanta Sandulu, DFKI, Germany
- Purbasha Chowdhury, Ca' Foscari University of Venice, Italy
- Pål Vegard Johnsen, SINTEF, Norway
- Richard Oliver Lane, QinetiQ, UK
- Samuel Hill, DFKI, Germany
- Thanasis Tsafonis, ATC – Athens Technology Center, Greece
- Tim Barz-Cech, HMS Analytical Software, Germany
- Tim Kosack, German Aerospace Center, Germany
- Yiqing Zhao, Amazon, USA

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