## Preface

Luca Longo<sup>1</sup>, Weiru Liu<sup>2</sup> and Grégoire Montavon<sup>3</sup>

<sup>1</sup>Artificial Intelligence and Cognitive Load Research Lab, The Applied Intelligence Research Centre, School of Computer Science, Technological University Dublin, Dublin, D07 EWV4, Ireland <sup>2</sup>University of Bristol, Bristol, United Kingdom

<sup>3</sup>Department of Mathematics and Computer Science, Freie Universität Berlin, Berlin, Germany

The 2nd World Conference on eXplainable Artificial Intelligence (xAI-2024) was held from Wednesday, 17th to Friday, 19th of July 2024. On the second and third day of the conference, we had the pleasure of hosting the Late-breaking work, Demos and the Doctoral Consortium tracks.

The Late-breaking work track provided a unique opportunity to share valuable ideas, elicit helpful feedback on early-stage work, and foster discussions and collaborations among colleagues. Late-breaking results are research-in-progress that contain original and unpublished accounts of innovative research ideas, preliminary results, industry showcases, and system prototypes, addressing eXplainable Artificial Intelligence (XAI) theory and practice. In addition, it included recently started research projects or syntheses. Overall, 33 Late-breaking manuscripts were accepted and presented via posters.

The Demo track showcased research prototypes or commercially available products. Demo submissions were based on an implemented and tested xAI-based system that pursues one or more innovative ideas in the interest areas of the conference. Demonstrations are an exciting way to showcase implementations of xAI-based systems and to get valuable feedback from the community. Overall, seven demos were presented with a dedicated stand at the conference.

The Doctoral Consortium track organised within the conference allowed doctoral scholars to explore and develop their research interests under the guidance of distinguished scholars from the field of xAI, who provided constructive feedback and advice. In particular, this forum also allowed PhD scholars to present and discuss their research ideas with experienced scholars in a supportive, formative, and critical environment. It was organised into three 90-minute sessions, the first of which featured spotlight presentations by participants, and the second and

Late-breaking work, Demos and Doctoral Consortium co-located with The 2nd World Conference on eXplainable Artificial Intelligence: July 17–19, 2024, Valletta, Malta

 <sup>0000-0002-2718-5426 (</sup>L. Longo); 0000-0001-8356-1361 (W. Liu); 0000-0001-7243-6186 (G. Montavon)
0 0 0 2024 Copyright for this paper by its authors. Use permitted under Creative Commons License Attribution 4.0 International (CC BY 4.0).

CEUR Workshop Proceedings (CEUR-WS.org)

third of which consisted of expert lectures on research design followed by hands-on exercises. Eventually, the DC provided a mechanism to network and build collaborations with other community members and explore career pathways available after completing their PhD degree. Overall, 18 doctoral consortium proposals were accepted and discussed at the conference.

## Acknowledgments

The xAI-2024 organisation<sup>1</sup> and the chairs express their gratitude to committee members of the Late-breaking Work, Demos and Doctoral Consortium tracks that helped review submissions to each of these under a single-blind peer-review process.

Late-breaking work and demos committee

- Hanna Abi Akl, Data ScienceTech Institute
- André Artelt, Bielefeld University
- Andrea Seveso, Università degli Studi Milano-Bicocca
- Andrea Visentin, University College Cork
- Bach Van-Nguyen, Marburg University
- Björn-Hergen Laabs, University of Lübeck
- Christian Geißler, TU-Berlin
- Damiano Verda, Rulex Inc.
- Dawid Rymarczyk, Jagiellonian University
- Domenico Furno, Università degli Studi di Salerno
- Eduard Barbu, Institute of Computer Science, Tartu
- Eduardo Paluzo-Hidalgo, Universidad Loyola Andalucía
- Erman Acar, University of Amsterdam
- F. Amílcar Cardoso, University of Coimbra
- Frederik Pahde, Fraunhofer Heinrich Hertz Institute
- Henning Müller, University of Geneva
- Hubert Baniecki, University of Warsaw
- Huimin Dong, Sun Yat-sen University
- Johanna Vielhaben, Fraunhofer HHI
- Julia Herbinger, Ludwig-Maximilians-Universität München
- Leander Weber, Fraunhofer Heinrich-Hertz-Institut
- Lorenz Linhardt, Technische Universität Berlin
- Lorenzo Famiglini, University of Milano-Bicocca
- Maike Schwammberger, Karlsruhe Institute of Technology
- Marco Podda, University of Pisa
- Marta Caro-Martínez, Universidad Complutense de Madrid
- Mengnan Du, New Jersey Institute of Technology

<sup>1</sup>https://xaiworldconference.com/2024

- Monica Palmirani, University of Bologna
- Quynh Phuong-Le, Jeonbuk National University
- Sheikh Rabiul Islam, Rutgers University
- Shreyasi Pathak, University of Twente
- Stephan Scheele, University of Bamberg
- Tobias Matzner, Paderborn University
- Verena Klös, Technische Universität Dresden
- Xiaowei Liu, Hunan institue of engineering
- Yazan Mualla, Université de technologie de Belfort Montbéliard

Doctoral Consortium committee & mentors

- Omran Ayoub, Scuola Universitaria Professionale della Svizzera Italiana
- Felix Biessmann, Berlin University of Applied Sciences
- Duarte Folgado, Fraunhofer AICOS
- Johannes Fürnkranz, Johannes Kepler University Linz
- Riccardo Guidotti, University of Pisa
- Andreas Holzinger, Human Centered AI
- Gjergji Kasneci, TU Munich
- Luca Longo, Technological University Dublin
- Tuwe Löfström, Jönköping University
- Fabio Mercorio, University of Milano Bicocca
- Grégoire Montavon, Freie Universität Berlin
- Lia Morra, Politecnico di Torino
- Nicolas Papadakis, CNRS
- Enea Parimbelli, University of Pavia
- Marco Podda, University of Pisa
- Maria Riveiro, Jönköping University
- Udo Schlegel, University of Konstanz
- Ute Schmid, University of Bamberg
- Ruth Urner, York University
- Giulia Vilone, Technological University Dublin
- Stephan Wäldchen, Zuse Institut Berlin