

# The 21st International Conference on Intelligent Environments

23.-26. June 2025 Darmstadt, Germany

## Call for Papers

### 21st International Conference on Intelligent Environments (IE 2025)

Darmstadt, Germany

23th-26th of June 2025

<https://www.ie2025.fraunhofer.de/>

The International Conference on Intelligent Environments (IE) is in its twenty-first year and is now recognized as a major annual venue in the area. IE, which has been hosted worldwide, offers a truly international forum and welcomes contributions from all over the planet. Intelligent environments refer to physical spaces in which information and communication technologies, artificial intelligence, interface sensing and actuating technologies are woven to create interacting spaces. The ultimate objective of such environments is to enrich users' activities, while allowing users to manage them and be aware of each other's capabilities.

The 21st International Conference on Intelligent Environments (IE2025) will take place in Darmstadt, Germany. Conveniently located just a 30-minute bus ride from Frankfurt International Airport, the city offers excellent accessibility for global attendees. Renowned as a hub of innovation and research, Darmstadt provides an inspiring setting for the conference. For those unable to attend in person, IE2025 will also offer hybrid (online) participation options.

**Conference Program:** IE is a multidisciplinary event welcoming contributions from a diversity of various relevant areas, including sensors and actuators, signal processing (incl. audio and images), networking, human-computer interaction, artificial intelligence, software engineering, context-awareness, internet of things, pervasive and ubiquitous computing, applied in domains such as healthcare, education, culture, building environments and smart cities. The event will include the followings.

- full (8-page) and short (4-page) papers
- 2 special sessions
- workshops
- 3 tutorials
- a doctoral colloquium
- an industrial forum
- demos & videos session

**Special Sessions:** IE2025 will have 2 special sessions

- Ecological and Human Synergies Intelligent Design for the Anthropocene
- Empowering the Elderly through Intelligent Technologies: Sociotechnical Approaches for Inclusive Aging

**Workshops:** The conference will start with a series of workshops :

- QUITE - Quantum, IoT, and Technologies for Secure Environments
- WITLE - Workshop on Intelligent Teaching and Learning Environments
- WISHWell - Workshop on Intelligent Environments Supporting Healthcare and Well-being
- WORIE - Workshop on the Reliability of Intelligent Environments
- ALLEGET - Workshop on Artificial intelligence and machine learning for Emerging Topics
- WISSA - Workshop on Intelligent Systems for Smart Agriculture
- DiDiT - Workshop on Distributed Digital Twins
- CLEAR-AI - Compliance, Legal, and Ethical Aspects of AI Regulation

**Tutorials** IE2025 will host 3 tutorials in person

- Which Missing Feature Should I Acquire If My Data Is Streaming? - An Introduction to Active Feature Acquisition on Data Streams
- Introducing a Quality Enhanced Process for Developing Intelligent Environments
- Tutorial on Explainable and Robust AI for Industry 4.0 & 5.0 (X-RAI)

**Publications:** As in previous editions, we expect all papers accepted at the main conference to be published by IEEE-indexed proceedings (currently in negotiation with IEEE, as in previous editions). All papers accepted in the workshops will be published as a volume of the IOS Press Ambient Intelligence and Smart Environments book Series of IOS Press, which is published Open Access and indexed by Clarivate (Web of Science). Both the articles in the IEEE proceedings and the IOS Press books will be ISI-indexed. As in previous years, selected papers will be invited to be extended and submitted to journals for publication.

**Keynote Speakers:** IE2025 includes keynote lectures by the following distinguished speakers.

- Klara Nahrstedt, University of Illinois at Urbana-Champaign, USA
- Sumio Morioka, Interstellar Technologies, Japan
- Dirk Kutscher, The Hong Kong University of Science and Technology (Guangzhou), Hong Kong

### Doctoral colloquium

The aim of the colloquium is to provide research students an opportunity to meet other people in a similar position, make relatively informal presentations, receive feedback from experts in the field, exchange ideas and experiences with each other, and make connections and have fun! All accepted presentations will be submitted as short (4-page) papers and published in the IE2025 IEEE Proceedings. A prize will be awarded for the best colloquium paper.

### Industrial Forum

In the Industrial Forum, colleagues from the industry domain will have the opportunity to showcase their projects while attracting funding or further expand collaborations with industry and academia at an international level. A limited number of presentation/demo slots of up to 30 minutes including questions and answers will be available for industry partners. During these slots, it will be possible for companies to present products/solutions/projects related to Intelligent Environments.

### Proceedings

- Papers accepted in the main conference as either short or full paper will be published in IEEE proceedings and available through IEEE Xplore.
- Papers accepted in workshops will be published as a volume of the IOS Press Ambient Intelligence and Smart Environments book Series of IOS Press.

Proceedings will be indexed by Web of Science and SCOPUS.

### Journal publication

A selection of papers will be invited to extend and submit extended versions to special issues of high-quality journals:

### Awards

The following 8 awards will be presented at IE2025

- Best full paper award
- Best short paper award
- [Beatrice WORSLEY](#) award (best quality paper with a female co-author)
- Best presentation awards by a female presenter and a male presenter
- Award for the most influential paper in the last 5 years
- Best doctoral colloquium paper award
- Best demo & video award

### Important Dates:

Conference paper submission:	1 December 2024
Communication of results:	20 February 2025
Camera ready versions	28 March 2025
Workshops paper submission	1 March 2025
Workshops results:	5 April 2025
Workshops camera ready	15 April 2025

<p><b>Honorary Chair:</b> Dieter W. Fellner (TU Darmstadt, Germany)</p> <p><b>General Chair:</b> Arjan Kuijper (Fraunhofer IGD/TU Darmstadt, Germany)</p> <p><b>Program Chairs:</b> Hirozumi Yamaguchi (Osaka University, Japan) Stephan Sigg (Aalto University, Finland)</p> <p><b>Local Organizing Committee Chair:</b> Florian Kirchbuchner (Fraunhofer-IGD, Germany)</p> <p><b>Workshop Chairs:</b> Raul Aquino Santos (University of Colima, Mexico) Silvia Faquiri (Rus) (Fraunhofer-IGD, Germany)</p> <p><b>Posters and Short Papers Chairs:</b> Paula Lago (Concordia University, Canada) Goran Vojković (University North, Croatia) Dennys Matthies (Technische Hochschule Lübeck, Germany)</p> <p><b>Doctoral Colloquium Chairs:</b> Xi (James) Zheng (Macquarie University, Australia) Andrés Muñoz Ortega (University of Cadiz, Spain)</p> <p><b>Demos and Video Chairs:</b> Daniela Micucci (University degli Studi di Milano-Bicocca, Italy) Sergio Staab (RheinMain University of Applied Sciences, Germany)</p> <p><b>Special Session Chairs:</b> Aditya Santokhee (Middlesex University, Mauritius)</p>	<p><b>Topics of interest include but are not limited to:</b></p> <ul style="list-style-type: none"> <li>Smart spaces</li> <li>Smart cities</li> <li>Smart communities</li> <li>Mobile computing</li> <li>Multimodal interaction</li> <li>Robotic companions</li> <li>Artificial intelligence</li> <li>Computational intel.</li> <li>Middleware</li> <li>Architecture</li> <li>Virtual/Mixed reality</li> <li>Collaborative tools</li> <li>Sensors and actuators</li> <li>Industry 4.0</li> <li>Smart buildings</li> <li>Smart education</li> <li>Smart healthcare tech</li> </ul>
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<p>Sunil Choenni (Dutch Ministry of Justice and Security, Netherlands)  Robin Horst (Fraunhofer IGD, Germany)</p> <p><b>Keynotes and Tutorials Chairs:</b>  Slawomir Nowaczyk (Halmstad University, Sweden)  Biyang Fu (RheinMain University of Applied Sciences, Germany)</p> <p><b>Journal Special Issues Chairs:</b>  Sira Yongchareon (Auckland University of Technology, NZ)  Jeannette Chin (UEA -UK)</p> <p><b>Publicity &amp; WWW &amp; Social Media Chairs:</b>  Paula Lago (Concordia University, Canada)  Jeannette Chin (UEA -UK)  Hamada Rizk (Osaka University, Japan)</p> <p><b>Awards and Prizes Chairs:</b>  Ruizhi Liao (The Chinese University of Hong Kong, China)  Carlos Rodríguez Domínguez (University of Granada, Spain)</p> <p><b>Professional Society Liaison Chair:</b>  Juan Carlos Augusto (Middlesex University, UK)</p> <p><b>Industrial Forum Chair:</b>  Khuong Minh Vu (National University of Singapore)</p>	<p>Pervasive computing  Context awareness  Energy Efficiency  Ambient Assisted Living  Evaluation and Corpora  Evaluation Paradigms  Data Acquisition  Labelling and Data Sets  User Studies  Signal Processing (incl. audio and images)</p>
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