"Future Knowledge and Competence for Al-driven Innovation in Europe and Japan"

jointly organized by









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https://liu.se/en/research/ejea-conference-2024

This year's conference will be held both in person and online at Linköping University (Sweden) on November 5-7, 2024. It will offer online participation for keynotes and workshops from Japan and Europe. Excursions and company visits in Linköping and surrounding places are planned in person in the afternoons.

The **EJEA Conference 2024 opens the floor for presentations and discussions** from a broad range of perspectives and aspects. Europe and Japan have a lot in common but also face different challenges - on a local as well as on a global level. The conference focuses on the current complex mid-term, and long-term transformations in Japan and Europe - such as realizing fair and trustworthy AI for managing integration, cooperation, participation, and competition in society, economy, and research. Megatrends for 2030 will be guiding the 2024 conference. They include technological progress most notably AI, as well as application areas like economy, health, agriculture, education, society, culture, and work assisted by AI.

Conference Objective

The conference aims to update the Japanese-European relationship, to strengthen exchange and collaboration between the two regions focusing on Japan, as well as:

- develop integrated views and common recommendations that have the potential to maximize the opportunities while minimizing the risks
- develop perspectives and strategies for societal and digital transformation in a peaceful spirit based on innovative technology making use of Al
- develop concepts for managing the complex challenges in Japan and Europe: such as integration, cooperation, participation, separation, and competition

Target Groups

Individual experts and citizens, decision-makers and opinion leaders from related organizations, companies, universities, research institutes as well as public administration and governments from Japan and Europe. By this, a platform of knowledge and expertise will be created.

Kevnote Lectures

- Professor Arisa Ema, University of Tokyo (Japan), Pathways to the Al governance
- Jeanette Nilsson, Research Institutes of Sweden RISE, Centre for Applied AI (Sweden), AI Agenda for Sweden - the process that builds on inclusion, sharing knowledge and working together
- **Professor Osamu Sakura**, RIKEN, AIP Center for Advanced Intelligence Project (Japan), *How Should We Consider the Cultural Aspects of Human-AI Relationships?*

- **Milad Morad**, Fraunhofer FIT, RWTH Aachen University (Germany), Exploring the Foundations of Human-AI Teaming
- Professor Koji Kida, Kagawa University (Japan), Re-design in Homage to the Works of Kunibo Wada: The Challenge of AI and Student Designers
- **Professor Linnea Stenliden**, Linköping University, Department of Behavioural Sciences and Learning (Sweden), *Bridging the Gap: Exploring Al literacy for Teachers and Students in a Transformative Educational Landscape*

We invite you for active contribution with lectures, workshops, posters, and discussions in developing

- new actionable and inclusive solutions for fostering
- new areas of research, education and innovation for the benefit of all generations
- new contents and topics taking into account intercultural, local, and global perspectives and aspects
- new concrete interdisciplinary methods and models to achieve sustainable and resilient societies
- new opportunities for and forms of cooperation and partnerships on a local and global level

This call intends to attract experts and experiences in current AI research as well as in green deals, economy systems, energy efficiency, healthcare systems, security issues and intercultural communications interested in shaping a sustainable future!

We welcome abstract submissions for the following categories:

1. Oral Contributions

We ask for oral contributions, that should be no longer than 10 minutes and presented during parallel workshops (see 2. below).

2. Workshops

We welcome your offers to organize and co-chair a workshop in the scope of the conference. Each workshop organizer and co-chair is also involved in reviewing submissions of oral contributions in his/her field. Please note that organizing a workshop must be performed by the workshop-chairs. The workshop organizers are supposed to also take individual submissions for oral contributions (see 1) into consideration.

3. Posters

Posters from different perspectives are very welcome. Submissions are not limited to established academics; we also encourage university students and representatives from the industry to submit their posters!

4. Demonstrations and Exhibitions

Demonstrations and exhibitions from industry, research institutions, and smart organizations dealing with innovative systems (e.g. robots, Al-software, social services etc.) are very welcome from Europe and Japan.

5. Presentation and Introductions of Smart Cities and Companies as well as Clusters and Regional Initiatives

Corresponding presentations and/or exhibition booths are very welcome! Please contact us also if you are considering an online presentation!

Submission Guidelines

Activities still in progress can be presented and discussed.

Please send your submission (in English) by September 10th. In case you want to organize a workshop we would appreciate your submission as soon as possible!

by email to ejea-conf-2024-submission@fit.fraunhofer.de
and use the template offered at:
https://liu.se/en/research/ejea-conference-2024/call-for-contributions
and include the following information:

- Given name, family name, title, affiliation, URL, email address, phone number
- Abstract: 1 page is suitable
- Optional: CV
- Please indicate whether you want to <u>organize a workshop</u> by informing the organizers <u>asap</u> sending the <u>workshop title</u> by email. The abstract for the workshop may be submitted later.
- Please indicate whether you want to contribute by an oral contribution, a workshop, a
 poster, a demonstration/exhibition, or a presentation/introduction of smart city/company
 or cluster/regional initiative.
- Please indicate your preference regarding your participation (in person / online / to be decided)
- By sending your submission you declare consent, that your submitted information may be published on the conference's website.

Submissions are reviewed on a weekly basis and you will receive feedback within two weeks. Your contribution is finally accepted after you have registered for the conference and paid the conference fee.

Registration

Please register at https://liu.se/en/research/ejea-conference-2024

Conference Background

The European Japan Experts Association (EJEA) was established by the Japan-German Center Berlin (JDZB) in 1995 and started annual conferences in 2018. The conferences aim to explore the similarities and challenges faced by Europe and Japan in the digital transformation era.

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- East Sweden Convention Bureau www.escvb.se/en/
- Embassy of Japan in Sweden https://www.se.emb-japan.go.jp/itprtop_sv/index.html
- GRANITE https://granite-ambassadors.com/
- Linköping Science Park https://linkopingsciencepark.se/
- RIKEN Europe https://europe.riken.jp/
- Shinshu University, Faculty of Engineering www.shinshu-u.ac.jp/english/
- Toshiba International Foundation www.toshibafoundation.com

In October 2023 the G7 leaders welcomed international guiding principles on Al and a voluntary Code of Conduct for Al developers. This **Hiroshima Al Process Comprehensive Policy Framework** consists of four pillars:

- 1. Analysis of priority risks, challenges and opportunities of generative Al
- 2. International Guiding Principles for all AI actors in the AI ecosystem
- 3. International Code of Conduct for organizations developing advanced Al Systems
- 4. Project-based cooperation in support of the development of responsible AI tools and best practices

Japan's Al-related research is based on the "Integrated Innovation Strategy 2021" and the "Al Strategy 2019: Al for All People, Industries, Regions, and Governments," which led to the formation of the "Al Japan R&D Network". This network aims to further enhance Japan's Al-related research capabilities and promote social implementation of research results. Emphasizing the importance of collaboration between universities and public research institutes, the network encourages institutions to leverage their respective strengths. This network was established in 2019 by the National Institute of Advanced Industrial Science and Technology (AIST), the Institute of Physical and Chemical Research (RIKEN) and the National Institute of Information and Communications Technology (NICT). Kagawa University and Shinshu University belong to the "Al Japan R&D Network".

The EU's approach to AI centers on excellence and trust, aiming to boost research and industrial capacity while ensuring safety and fundamental rights. The European Commission's AI Strategy (2018) prioritizes excellence by fostering innovation, proposing regulations to ensure ethical AI development and deployment, and encouraging collaboration between research organizations and companies as well as collaboration among research centers and investing in research at the EU level. The European AI Strategy aims to unlock the full potential of AI for societal good while mitigating potential risks, shaping the responsible future of AI.

Al activities at Linköping University
Linköping University has been conducting Al research for over 50 years and today does leading research in a broad range of topics within Al. Notable areas include computer vision, natural language processing, planning, autonomous systems, and machine learning. Three especially interesting topics are the development of trustworthy and factual large language models (TrustLLM), computer vision techniques for video object tracking, and sports analytics. LiU also has several robot labs equipped with ground and aerial robots capable of performing a wide range of tasks.

Al activities at Fraunhofer FIT As a partner for digitization, application-focused generative AI integration and machine learning, the Fraunhofer Institute for Applied Information Technology FIT has been developing IT solutions tailored to people and seamlessly integrated into business processes for 40 years. As a driving force of human-centered innovation, FIT not only provides guidance, but also shapes the digital transformation in business, the environment and society. Thus, the understanding and purpose-driving integration of generative AI technologies from a user's perspective play a major role in our research activities. Together with end users, we investigate processes to find suitable, understandable and therefore accepted solutions.

Al activities at Kagawa University Kagawa University is actively involved in innovative endeavors at the intersection of Al research and education. In the realm of education, Kagawa University acts as a representative institution within the Shikoku block of the Japan Inter-University Consortium for Mathematics, Data Science, and Al Education, comprising higher education institutions across Japan. Kagawa University provides specialized education programs catering to students with varying levels. For instance, "The Crisis Management Program for Mathematics, Data Science and Al Education" offers a unique opportunity to delve into advanced Al utilization techniques, particularly in the realm of disaster

mitigation. This program equips students with AI skills in areas such as object detection modeling, which are crucial for identifying slope failure regions and enhancing disaster preparedness measures.

Program Committee

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Host

Linköping University, Sweden

represented by:

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Previous EJEA Conferences:

- "Riding the Digital Wave into the Future: Chances, Risks and Actions for Japan and Europe", jointly organized by EJEA, Fraunhofer FIT, Kagawa University, and Linköping University in 2023 (hybrid): https://ejea.eu/conference-2023/
- "Innovation and Action for Managing Urgent Future Local and Global Issues and Domains in Japan and Europe", jointly organized by EJEA, Linköping University, Fraunhofer FIT and RIKEN in 2022 (online): https://ejea.eu/conference-2022/ and https://www.fit.fraunhofer.de/en/business-areas/human-centered-engineering-and-design/ejea-conference-2022.html
- International conference on "Human-centered Sustainability and Innovation for an Alassisted Future: New Interdisciplinary Education & Research for the Next Stages in Japan and Europe" / AI が支援する未来に向けた人間中心のサステイナビリティとイノベーションを考える: 新たなステージへ導く日本とヨーロッパの学際的な教育と研究の紹介(Japan)
 (Japan)
 https://ejea.eu/conference-2021/ and www.kagawa-u.ac.jp/kuio/circ/event/ejeaconf/
- International conference on "Human-centered Digitalization: How to Develop Next Generations of Humans and Robots for a Secure, Harmonic and Prosperous Future of Europe and Japan" (Austria) 2019: https://ejea.eu/conference-2019/
- International conference on "Integration and Disintegration in the Japanese Vision of Society 5.0: A Model for an Open Society in Europe?" (Sweden) 2018: https://ejea.eu/conference-2018/