# 1st International Workshop
# **Software Architecture and Generative AI**

Co-located with ICSA 2025 in Odense (Denmark)

## IMPORTANT DATES

- **Dec 20, 2024**
  **Submission**

- **Jan 20, 2025**
  **Notification**

- **Jan 27, 2025**
  **Camera-ready**

## DESCRIPTION

SAGAI aims to establish a community of researchers focused on exploring novel ways of using generative AI to improve both development time and runtime aspects of software architectures.

The workshop objectives include:
- To provide a forum for scientists and practitioners within the software architecture community to reflect on the potential and limitations of generative AI in software architecture;
- To disseminate early results in the field of generative AI for software architecture;
- To explore how generative AI can support different audiences (e.g., software architects, developers, requirements engineers, and end users) across architecture activities (e.g., identification of architecture significant requirements, architectural design, evaluation, implementation, and governance).
- To stimulate the investigation of generative AI at runtime in software architectures to address quality attributes such as adaptability, fault tolerance, interoperability, operability, and recoverability, among others.

## TOPICS OF INTEREST

- Approaches to use generative AI in architecture design and evaluation
- Generative AI to support architecture knowledge management
- Generative AI to support the elaboration of architecture scenarios descriptions
- Generative AI to support the elaboration of architecture evaluation protocols
- Integration and interaction of generative AI methods and tools with existing state-of-the practice tools
- Improvement of context knowledge used by co-pilots and LLMs in multiple contexts
- Approaches to use generative AI in modernization of legacy systems
- Experiences and ideas on teaching generative AI techniques to software architects
- Approaches to use generative AI at runtime to address quality requirements
- Tactics to deal with the non-deterministic character of generative AI to allow for effective and efficient solutions at runtime

## ORGANIZING COMMITTEE

- **Dr. Rodrigo Falcão**
  (Fraunhofer IESE, Kaiserslautern, Germany)
- **Dr. Frank Elberzhager**
  (Fraunhofer IESE, Kaiserslautern, Germany)
- **Dr. Pablo Antonino**
  (Fraunhofer IESE, Kaiserslautern, Germany)
- **Prof. Dr. Rafael Capilla**
  (Rey Juan Carlos University, Madrid, Spain)

**Fraunhofer IESE**

**Universidad Rey Juan Carlos**

https://iese.fraunhofer.de/sagai
Submission:
https://easychair.org/my/conference?conf=icsa2025