ICL Special Session
Call for Papers

Title
AIEE - Artificial Intelligence in Engineering Education

Acronym
AIEE

Overview

With the accelerated development and increased applications of artificial intelligence (AI) systems, we are facing fundamental changes in many areas of life, especially in education. The way we live, and work is changing fundamentally. Higher education has a central role to play. On the one hand, it must make people fit as workers and responsible citizens in a world shaped by AI systems. On the other hand, AI offers great potential for improved higher education, e.g., through precise personalization of learning pathways and tailored support services. Current questions to ask are: Is artificial intelligence changing education? How will we teach and learn in the future? What competencies will the AI world of tomorrow require? What opportunities and risks does the technology offer for higher education?

The Special Session on Artificial Intelligence in Engineering Education (AIEE) scheduled to take place during the ICL/IGIP 2023 Conference in Madrid, Spain in September 2023, seeks to comprehensively address all perspectives related to the intersection of AI and engineering education. The session aims to cover all aspects of NLP-powered learning, adaptive learning, augmented intelligence, generative AI tools, AI writing assistants, AI-enhanced STEM learning, educational chatbots, gamification, application of didactic frameworks, teaching cases, methodologies, experience reports and applications of AI in engineering education. The primary objective is to facilitate knowledge exchange and networking between industry and academia by bringing together stakeholders with a shared interest in the topic.

Topics

This special session aims to facilitate the exchange of ideas and the presentation of the latest research findings in the field of artificial intelligence in engineering education. Submissions of
original contributions that address novel applications, studies, and experiences related to this area are highly encouraged. Topics of interest include but are not limited to:

- NLP-powered learning (ChatGPT, Bard, and other tools)
- Adaptive learning
- Augmented intelligence
- AI Writing Assistants
- Generative AI tools
- AI-enhanced STEM learning
- Educational chatbots
- Sentiment analysis
- Gamification
- Recommender systems
- Cognitive computing
- Swarm intelligence
- Application of didactic frameworks
- Teaching cases
- Methodologies
- Experience reports
- Applications of AI in engineering education

While papers on these topics are particularly welcome, we also encourage submissions on other aspects of AI in education. All papers should present original work that advances the state of the art or practice in the field and should clearly articulate the relevance and potential impact of the work.

Program Committee

Chair(s)
Birgit Oberer, ETCOP Institute for Interdisciplinary Research, Austria, oberer@etcop.at
Alptekin Erkollar, ETCOP Institute for Interdisciplinary Research, Austria, erkollar@etcop.at

Members
Silvia Elaluf-Calderwood, Florida International University, USA, selalufc@fiu.edu
Feza Kerestecioglu, Kadir Has University, Turkey, kerestec@khas.edu.tr
Elif Kongar, University of New Haven, USA, elf.kongar@gmail.com
Elyssabeth Leigh, University of Technology Sydney, Australia, elyssabeth.leigh@icloud.com
Tobias Seidl, Hochschule der Medien Stuttgart, Germany, seidl@hdm-stuttgart.de
Şirin Tekinay, Global Engineering Deans Council, USA, sirin.tekinay@gmail.com
Axel Zafoschnig, Vice President, IGIP, axel.zafoschnig@bildung-ktn.gv.at