ICL Special Session Proposal Template

Title
AI in learning - a double-faced Janus?

Acronym
AiL’23

Overview
Learning and education are facing challenges that are shaping them in a way that we have not witnessed for decades. One of the main forces that has impacted education over the past few years was the COVID pandemic. Higher education institutes and educational institutes in general have adapted to the challenge in various ways. A few years after, education is being tested with a challenge that is shaking the educational institutions at its core. This challenge is Artificial Intelligence.

AI showed over the last year unprecedented development, especially in generative networks and large language models. This development has triggered a lot of researchers and public authorities to be concerned to the extent that some have called for the halting of the development of these tools for some time till we get a deeper understanding of the nature of this new creation. These models have a deep impact on all sides of humanity that are related to creativity, wellbeing, and in particular to education.

These tools and models are a two-edged sword. On one side, AI-tools like DALL-E, MidJourney, ChatGPT, BART etc. are great tools as learning assistants in different areas, learning content generators and for the personalization of learning. But on the other side, the methods and the deliverables of education are being challenged due to the existence of these tools. Some challenges include the authenticity of the work developed by the learners and the quality of education of future generations among many other challenges.

Should academic institutes adopt AI? Should they challenge them? And if they chose to adopt them, how should they adopt them and to what extent? These questions belong to education in general, but in particular to higher education due to the learner skills and the learning objective of creating knowledge and developing skills.
Topics

- **The potential of AI to transform engineering education:** AI has the potential to transform engineering education in several ways, including by providing personalized learning experiences, automating tasks, and providing feedback.
- **The challenges of implementing AI in engineering education:** There are several challenges associated with implementing AI in engineering education, including the need for data, the need for skilled instructors, and the need to address ethical concerns.
- **The future of AI in engineering education:** The future of AI in engineering education is uncertain, but it is likely that AI will play an increasingly important role in the way that engineering is taught and learned.
- **The role of AI in developing 21st century skills:** AI can be used to develop 21st century skills such as critical thinking, problem solving, and creativity.
- **The ethical implications of using AI in engineering education:** There are a number of ethical implications associated with using AI in engineering education, such as the potential for bias and discrimination.

Program Committee

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Important dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 May 2023</td>
<td>Submission of complete papers, special session papers</td>
</tr>
<tr>
<td>19 Jun 2023</td>
<td>Notification of Acceptance</td>
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<tr>
<td>10 Jul 2023</td>
<td>Camera-ready due and Author registration deadline</td>
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<tr>
<td>26 Sep 2023</td>
<td>Conference Opening</td>
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