分论坛 4 Parallel Session 4

大语言模型和计算机教育
Large Language Model & Computing Education

随着人工智能技术的飞速发展，大语言模型已成为计算机科学领域的一大突破。这些模型不仅能够理解和生成自然语言，还在教育领域展现出巨大的潜力。"大语言模型和计算机教育"将探讨大语言模型在计算机教育中的应用与实践，分析其如何改变传统的教育模式，提高教学质量和效率。

· Explore the application and practice of LLM in computer education.
· Analyze how large language models are transforming traditional educational models and enhancing teaching quality and efficiency.

Call for Participation

Parallel Session 4: LLM & Computing

In the early summer of 2025, the renowned Harvard China Education Symposium (CES) will join the QS 5-star rated Education University of Hong Kong (EdUHK) to co-host a joint symposium on Emerging Technologies and Future Talent. This marks the first attempt by the Harvard CES team to co-host this signature event with an Asian university. The Symposium boasts an impressive roster of speakers from globally recognized institutions such as Harvard, Stanford, MIT, EdUHK and Peking University. This three-day event will delve into the integration of new technologies such as AI, the Metaverse, and Intelligent Reality within teaching, training, and talent development. We invite you to share your proposal and present in the parallel session on 10 May. Excellent proposal may be invited to publish the full version in high-impact journals (SCI, SSCI & CSSCI).

Parallel Session Introduction

The theme of this parallel session is 'LLM & Computing Education' aiming to explore the application of Large Language Models (LLMs) in educational practice. It seeks to promote teaching innovation, enhance the intelligence and personalization of learning processes, and optimize educational assessment and feedback mechanisms. The parallel session includes the following three sub-themes, providing a platform for educators, researchers, and technology developers to share research findings and practical experiences, fostering in-depth exchange and collaboration.

Sub-theme 1: Empowering Teaching Innovation with LLMs

This theme focuses on the cutting-edge applications of LLMs in teaching, discussing how advanced generative AI systems can be integrated into educational practice to explore new teaching models.

- Intelligent teaching assistants and applications based on LLMs
- Practices of LLMs in intelligent learning analytics and teaching decision-making
- Integration and application of digital teachers in interdisciplinary teaching
- Personalized content generation and teaching strategy optimization
- Empowering teacher professional development with LLMs
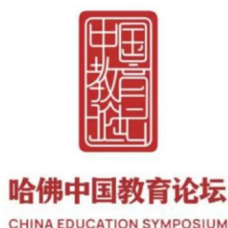
Sub-theme 2: Intelligent and Personalized Learning Processes

This theme centers on innovative practices of LLMs in the intelligence and personalization of learning processes to enhance student learning outcomes, efficiency, and engagement.

- Student performance prediction and adaptive path design based on LLMs
- Real-time feedback mechanisms and research on personalized educational agents
- Applications and practices in the generation of multi-modal learning resources
- Designing interactive learning experiences to enhance motivation and engagement
- Applications of LLMs in learning disability identification and personalized intervention

Sub-theme 3: Evaluation and Feedback in Teaching and Learning Supported by LLMs

This sub-theme focuses on the innovative applications of LLMs in the evaluation and feedback processes of teaching and learning. It explores how intelligent assessment and real-time feedback mechanisms can enhance the precision and personalization of evaluations.

- Construction of a dynamic learning evaluation system supported by LLMs
- Self-adaptive testing for learning outcomes based on LLMs
- Optimization of effectiveness evaluation and feedback mechanisms in teaching and training
- Construction of a multi-dimensional cognitive diagnosis mechanism supported by LLMs
- Applications of LLMs in promoting fairness and transparency in educational assessment

We sincerely invite scholars, students, and professionals from the industry to choose any of the above sub-themes based on their research directions and interests to share their latest findings and engage in discussions at this parallel session.

Guidelines for Proposal

Please prepare a **one-page** proposal containing the following information:

1. **Proposal Title:** The title of your proposal session.
2. **Proposal Abstract:** A brief description of your proposal topic and its relevance to the session topic.
3. **Proposal Objectives:** The purpose of the proposal and the expected research outcomes.
4. **Methodology:** The methods or data sources you plan to use.
5. **Contribution and Future Work:** The possible contributions of this proposal to the application of LLMs in the field of education, and future research directions.
6. **Contact Information:** Your full name, affiliation, email address, and phone number.

Please send your **one-page** proposal and other information as a **Word** attachment to the email address: <u>mhyin@nenu.edu.cn,</u> with the subject line "Your Name + Harvard CES-EdUHK Joint Symposium parallel session 4." Your participation will contribute to the advancement of LLMs' application and development in the field of education. We look forward to your valuable work and engaging in a discussion on the broad prospects of LLMs empowering computational education!

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