

# IEEE-TLT Special Issue on Artificial Intelligence Empowered Entrepreneurship Education and Lifelong Learning

## Call for Papers

Please contact [TLT-AI23@ieee.org](mailto:TLT-AI23@ieee.org) with any questions, comments, or concerns.

Author Resources for IEEE-TLT: [tinyurl.com/TLT22](http://tinyurl.com/TLT22)

Entrepreneurship education has emerged as a global initiative, playing a pivotal role in technological innovation, economic growth, and national prosperity. Contrary to the traditional teacher-centric and process-driven approach, entrepreneurship education requires a lifelong-learning stance that emphasizes the importance of continuous innovation and creativity, adopting a learner-centered and problem-based approach, and the adoption of new and evolving technologies. At the same time, technological advancements in artificial intelligence have propelled the progression of entrepreneurship education and lifelong learning outside of higher education. However, designing curricula to accommodate diverse population, including marginalized learners, still brings significant challenges. Compounding these challenges, a lack of effective evaluation tools hinders our ability to assess the quality of these educational programs and plan for future development.

This special issue in IEEE-TLT (*Transactions on Learning Technologies*) will invite research on the intersection of entrepreneurship education, lifelong learning, and artificial intelligence with the goal of examining how the emergence of AI technologies will promote change in these fields. In particular, this special issue aims to address the critical challenges and opportunities that arise from the implementation of entrepreneurship education and lifelong learning in various learning settings.

By collecting articles related to these topics, the special issue will present a unique opportunity to explore the intersection of AI empowered entrepreneurship education and lifelong learning. It will provide a much-needed platform for authors to submit original research on the latest reviews, theoretical frameworks, and empirical findings on the application of AI in these two fields.

## Suggested Topics:

Topics of interest for this special issue include, but are not limited to:

- Research on the exploration of applying AI technology to design innovative entrepreneurship courses.
- Research on the application of AI technology in evaluating the course quality of entrepreneurship education.
- Discussion on the use of AI technology in the simulation and analysis of real-world scenarios to enhance student innovation and entrepreneurial skills.
- Investigation on the use of AI to automatically generate high-quality learning materials to support entrepreneurship education and lifelong learning.
- Construction and integration of knowledge graphs across diverse occupations and methods to integrate them into entrepreneurship education.
- Discussion of criteria and standards employed in comprehensively assessing individuals through AI in the context of lifelong learning and entrepreneurship education environments.
- Integration of policies, educational institutions' strategies, and real-world developments, facilitated by AI, to foster the progressive and innovative advancement of lifelong learning and entrepreneurship education.
- The evaluation of the efficacy of AI in learning design, including the measurement of learning outcomes, student engagement, and motivation.
- Research on delivering personalized learning services that are tailored to the unique learning patterns and requirements of individuals in the context of AI-assisted lifelong learning.
- Research on the application of AI in the customization of personalized learning plans and educational resources, based on the interests, targets, and knowledge levels of individuals.
- Develop data privacy protection in AI-empowered lifelong education to ensure the protection of individual privacy and rights.
- Research on leveraging AI to analyze and forecast learning behaviors, providing personalized learning recommendations and intelligent support.

- Exploration of the integration of AI with Virtual Reality (VR) or Augmented Reality (AR) technologies and its potential to enhance the immersive and interactive nature of lifelong learning.
- Exploration of mechanisms of human learning, including using electroencephalograms, and behavioral methods to perceive learning behaviors, and devise targeted intervention mechanisms.
- AI for individuals with special learning needs, including exploring and discussing how artificial intelligence technologies are applied to cater to individuals with special learning needs, promoting personalized learning, intelligent assistants, and inclusive education.
- Cognitive neuroscience of learning and memory, such as understanding the neural basis of learning, memory formation, consolidation, retrieval processes, and their implications for education and interventions.
- Understanding cognitive development across the lifespan, such as investigating the impact of environmental and age factors on cognitive changes in the learning process.
- The role of AI and technology in promoting entrepreneurship education in underserved and marginalized communities.
- Exploration of cross-modal learning's impact on cognitive development in both children and adults, along with its significance for educational and intervention strategies.

**Note:** The IEEE-TLT Journal (indexed by SSCI, SCI, and EI) is somewhat unique among educational technology journals given our dual-discipline focus on CS (computer science) and LD Tech (learning design and technology). We expect papers to make substantive technical contributions to the development of learning technologies as well as to show how the technologies can be used to support learning. Papers that are concerned primarily with the evaluation of existing learning technologies and their applications are suitable for TLT only if the technologies themselves are novel, or if significant technical and/or design insights are offered.

#### **Submission and Review Process**

Abstracts may be submitted to the guest editors via email at [TLT-AI23@ieee.org](mailto:TLT-AI23@ieee.org);

this is not mandatory but will enable the editors to offer early feedback on the paper's suitability with respect to the aims and scope of the special issue.

Full manuscripts should be prepared in accordance with the [IEEE Transactions on Learning Technologies guidelines](#) and submitted via the [IEEE TLT AUTHOR PORTAL SUBMISSION SITE](#). (Maximum of 1 Main Manuscript in Word or LaTeX. Please don't add any extra docs such as a PDF to the Main Manuscript section.)

Please **Select the relevant Special Issue name** during the submission process. Manuscripts must not have been published or currently be under consideration for publication elsewhere. Only full manuscripts intended for review, not abstracts, should be submitted via the Author portal, and conversely, full manuscripts cannot be accepted via email.

Each full manuscript that passes an initial pre-screening will be subjected to rigorous peer reviews in accordance with TLT's editorial policies and procedures. It is anticipated that 10 or 12 articles (plus a guest editorial) will ultimately be published in 2024.

### **Important Dates**

Full manuscripts due: 15 December 2023

Completion of first round of reviews: 15 February 2024

Revised manuscripts due: 15 March 2024

Final decision notification: 15 April 2024

Publication materials due: 15 May 2024

Publication of special issue: August 2024

(All dates are subject to minor modification when editorial work is in progress).

### **Advisor**

Chetwyn Chan, The Education University of Hong Kong, Hong Kong, China

### **Guest Editors**

Minghao Yin, School of Information Science and Technology, Northeast Normal University, China

Greg Snow, eCampus, Boise State University

Enhong Chen, School of Information Science and Technology, University of Science and Technology of China, China

Pengyang Wang, Department of Computer and Information Science, University of Macau, China

Xiaoyan Chu, College of Education, Zhejiang University, China

Daniel Novak, School of Medicine, University of California-Riverside

Hong Fu, The Education University of Hong Kong, Hong Kong, China

Yanjie Song, The Education University of Hong Kong, Hong Kong, China