

# INVITED SESSION SUMMARY

#### Title of Session:

Aspects of intelligent learning systems: e-Learning across various educational contexts

#### Name, Title and Affiliation of Chair:

Prof. Dr. Hiroshi Ueda (Hosei University, Japan)

#### Name, Title and Affiliation of Co-Chair:

Associate Prof. Dr. Mohammad Nehal Hasnine (Hosei University, Japan) Associate Prof. Dr. Hiroya Suno (Hosei University, Japan) Associate Prof. Mr. Hisashi Hatakeyama (Tokyo Institute of Technology, Japan)

#### **Details of Session (including aim and scope):** Aim

In addition to e-learning using Learning Management System (LMS), intelligent and adaptive learning systems including next-generation digital learning environments have been applied to a variety of educational fields. Furthermore, artificial intelligence (AI) is considered to be the key technology for solving educational problems and smoothen teaching and learning. Online learning using such systems has the potential to realize optimized learning for learners regardless of time and distance.

This invited session focuses on various aspects of the intelligent and adaptive learning systems, including how various learning systems interact with learners/educators in capturing rich interaction data, pre-process and analyzing them using cutting-edge analytical methods such as knowledge discovery, natural language processing (NLP), data mining, deep learning, AI, etc. for changing the dynamics of physical and social environments. This invited session explores intelligent and affective aspects such as knowledge representation, automatic feedback generation, AI bias in learning systems, multimedia annotation, innovativeness in e-learning, etc. to design new tools that could solve complex social and educational problems.

Topics

Specific topics of interest include but not limited to:

- Intelligent and adaptive learning systems
- Technology-enhanced learning and its theoretical foundation
- Course management in online and virtual learning
- Usage of Learning Management System (LMS) for teaching and learning practices
- AI in education
- Applications of Generative AI (such as ChatGPT, Midjourney) in Education
- Practice in specific educational contexts (such as language learning, STEAM, and disaster prevention) using ICT
- Learning analytics and evidence-based education
- Usage, security, ethics, and privacy policy of educational data
- Development of educational tools
- Curriculum and instructional design
- Gamification and gamified learning environments
- Adaptive support for learning, models of learners, diagnosis, and feedback
- Modeling of motivation, metacognition, and affective aspects of learning
- Recommendation systems
- Complex system architecture
- Adaptation of AR/VR/XR in reshaping education
- Intelligent interfaces
- Models and techniques for educational data mining

• Embodied learning for wellbeing in education

### Important Date

- Submission of papers: 15 April 2024
- Notification of acceptance: 1 May 2024
- Final paper publication files to be received by 28 May 2024

• Early / Authors Registration Deadline: Same to KES conference deadline

Main Contributing Researchers / Research Centres (tentative, if known at this stage): Research Center for Computing and Multimedia Studies, Hosei University, Japan

Center for Innovative Teaching and Learning, Tokyo Institute of Technology, Japan

Website URL of Call for Papers (if any):

https://kesis.media.hosei.ac.jp/

## Email & Contact Details:

media-kesis 2024 @ml.hosei.ac.jp

Hiroshi Ueda, Ph.D, Professor

Research Center for Computing and Multimedia Studies, Hosei University,

3-7-2, Kajino-cho, Koganei-city, Tokyo, 184-8584

Tel: +81-42-387-6071 Fax: +81-42-387-6085