

CONFERENCE AGENDA

IEEE The 20th International
Conference on Computer Science
& Education



JULY 21- 25, 2026
ÓBUDA UNIVERSITY, BUDAPEST, HUNGARY

IEEE ICCSE 2026

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Welcome to ICCSE

Welcome Message from Prof. Dr. Levente Kovács, the Rector of Óbuda University



On behalf of Óbuda University and the ICCSE 2026 Organizing Committee, it is my great pleasure to welcome you to IEEE the 20th International Conference on Computer Science and Education (IEEE ICCSE 2026).

Since its inception in 2006, ICCSE has grown into a respected international forum for researchers, educators, and industry professionals to share advances in computer science, education, engineering, and emerging technologies. The conference promotes academic exchange and international collaboration among participants from universities, research institutes, and industry worldwide.

ICCSE 2026 will be held from July 21 to 25, 2026, at Óbuda University in Budapest, Hungary. Organized by the Computer Education Research Association of Chinese Universities and hosted by Óbuda University, with technical support from the IEEE Education Society and IEEE Hungary Section, the conference will focus on the theme **“AI-Driven Educational Digital Innovation along the Belt and Road”**. The program will cover a broad range of topics, including artificial intelligence, AI driven systems, data science, cybersecurity, AI-ready education, Curriculum, Policy, and Educational Research, Digital society, Ethics, and Governance etc.

Founded more than 145 years ago, Óbuda University is one of Hungary’s leading institutions in engineering, computer science, and applied sciences. With strong commitments to innovation, international cooperation, and industry engagement, Óbuda University has rapidly developed into a modern, internationally recognized university committed to excellence in education, research, and industrial collaboration..

We are honored to host ICCSE 2026 in Budapest. This conference offers an important opportunity to strengthen cooperation between Hungary and the global academic community, foster new partnerships, and explore future research opportunities in computer science and education. We are delighted to welcome scholars and professionals from around the world to enjoy both a world-class conference experience and the unique atmosphere of one of Europe’s most beautiful capitals.

I sincerely invite you to join us for this exciting gathering of knowledge, innovation, and friendship. I wish you a productive conference, inspiring discussions, and an enjoyable stay in Hungary.



Program at a Glance

(Jul 20-22, 2026)

Date	Time	Program	Room		
20/Jul (Mon.)	Budapest time (CEST, UTC+2)	Parallel discussion is subject to Budapest time	Conference Room		
	15:00-17:00	Sign in Registration and Conference Materials Collection	Óbuda University, Budapest, Bécsi út 96/B.		
Date	Time	Program	Room		Chair
21/Jul (Tue.)	Budapest time (CEST, UTC+2)	Parallel discussion is subject to Budapest time	Conference Room	Online Meeting Number (Tencent Meeting/VooV)	
	08:00-08:30	Play ICCSE's Promo Video	Bécsi út 96/B Lecture Hall	350-316-553	Wenxing Hong
	08:30-08:55	Opening Ceremony Prof. Maoqing Li Óbuda University leadership Present a commemorative gift			
	08:55-09:00	Group Photo			
	09:00-09:50	Keynote Speech I Prof. Dr. Levente Kovács Rector of Óbuda University, Hungary			Jie Hu
	09:50-10:10	Tea Break	---	---	--
	10:10-11:00	Keynote Speech II Prof. Arnold Pears Head of the Department of Learning in Engineering Sciences at the KTH Royal Institute of Technology, Sweden Reconsidering Engineering Education in the Face of Generative AI	Bécsi út 96/B Lecture Hall	350-316-553	Peter Galambos
	11:00-11:50	Keynote Speech III Yu (Frank) Huang Education Sector in Huawei Europe Enterprise Education for AI, AI for Education - The Next Era of Digital Learning, Huawei AI Solutions Empowerment and Global Education Innovation			Yu Xiong
	11:50-14:00	Lunch	---	---	---

Date	Time	Program	Room		Chair
21/Jul (Tue.)	Budapest time (CEST, UTC+2)	Parallel discussion is subject to Budapest time	Conference Room	Online Meeting Number (Tencent Meeting/VooV)	
	14:00-16:00	Invited Session (TuS1) AI Empowered Methods, Technologies, and Resources for Computer Science Talent Development	Classroom F07	350-316-53	Ke Xiong, Dan Tao, Wei Zhou
		Invited Session (TuS2) Interdisciplinary Integration: AI General Education and Future Talent Cultivation	Classroom F08	908-682-042	Juan Luo, Huan Zhao, Yuhui Cai
		Invited Session (TuS4A) New Technologies, Methods, and Models in Computer Experiment Teaching	Classroom F09	959-5337-8341	Shanshan Li Xuesong Fan
	16:00-16:20	Tea Break			
	16:20-18:20	Invited Session (TuS3) Construction and Application of Educational Agents: A New Ecosystem for Human-Machine Collaborative Education	Classroom F07	350-316-553	Yu Xiong
		Invited Session (TuS4B) New Technologies, Methods, and Models in Computer Experiment Teaching	Classroom F08	908-682-042	Shanshan Li Xuesong Fan
		Special Session Best Paper Candidates Session	Classroom F09	959-5337-8341	Yang Weng
	18:20-18:30	Break			
	18:30-21:00	Conference Banquet (Best Paper Award)	Please see the notice at the venue.		
Date	Time	Program	Room		Chair
22/Jul (Wed.)	Budapest time (CEST, UTC+2)	Parallel discussion is subject to Budapest time	Conference Room	Online Meeting Number (Tencent Meeting/VooV)	
	08:00-10:00	Parallel Session (TuS5) Data Science Technologies and Applications	Classroom F07	350-316-553	Hiroki Takada, Yasuyuki Matsuura
		Parallel Session (TuS6) Intelligent Learning, Analytics and Educational Systems -1	Classroom F08	908-682-042	Jie Hu
		Invited Session (WeS1) AI-Enhanced Digital Safeguards for Education in Marginalized Communities	OL	959-5337-8341	Yu Weng, Gulibanumu Kebaituli, Guixian Xu
		Parallel Session (WeS2) Teaching Innovation and Curriculum	OL	493-5369-4559	Xiangdong Li
		Special Workshop: DCLC Expert Committee Meeting Artificial Intelligence Literacy	OL	996-8470-1417	Wenxing Hong, Binyue Cui
	10:00-10:20	Tea Break	---	---	---
	10:20-12:20	Parallel Session (WeS3) Intelligent Learning, Analytics and Educational Systems-2	OL	350-316-553	Zheng Liu
		Parallel Session (WeS4) Intelligent Learning, Analytics and Educational Systems-3	OL	908-682-042	Yasuyuki Matsuura
		Parallel Session (WeS5) AI General Education	OL	959-5337-8341	Yuhui Cai
		Parallel Session (WeS6) Computer Science and Technology	OL	493-5369-4559	Jing Wang
	12:20-14:00	Lunch			
	14:00-16:00	Parallel Poster Session WeP1	Classroom F07/OL	350-316-553	---
		Parallel Poster Session WeP2		908-682-042	---

Technical Program

Chair: Ke Xiong Co-Chair: Dan Tao, Wei Zhou						
		Tuesday	Jul. 21	14:00-16:00		
Title	Authors	Session	Room	Date	Start	End
Teaching Machine Learning to Software Engineers	Nafiseh Kahani, Jason Jaskolka	TuS1.1	Classroom F 07	Jul.21	14:00	14:15
AI-Empowered Undergraduate Teaching Reform in Sino-Foreign Cooperative Education	Wei Wu, Junjie Xiao, Ping Zhong, Jinfang Sheng, Xiaozong Wang, Chuan Luo, Jiazhi Xia	TuS1.2	Classroom F 07	Jul.21	14:15	14:30
Research and Practice on AI-Empowered Teaching Model Reform in Software Engineering	Juanjuan Zhao, Lijing Zhang, Songhua Liu, Zijuan Zhao, Aoyu Li, Xiaoling Ren, Wanting Yang	TuS1.3	Classroom F 07	Jul.21	14:30	14:45
Investigating AI Usage Among Programming Students Through Semi-Structured Interviews	Iris Gaber, Amir Kirsh	TuS1.4	Classroom F 07	Jul.21	14:45	15:00
Long-Term Traffic Flow Forecasting via Segmented Iterative Spatiotemporal Graph Convolutional Networks	Tingting Fu, Lihao Zu, Peng Liu	TuS1.5	Classroom F 07	Jul.21	15:00	15:15
A PCPT Teaching Model for Artificial Intelligence Courses Driven by AI Empowerment and Feynman Learning	Ping Zhong, Shiyong Meng, Manling Teng, Yu Sheng, Lin Li	TuS1.6	Classroom F 07	Jul.21	15:15	15:30
Invited Session: Interdisciplinary Integration: AI General Education and Future Talent Cultivation Chair: Juan Luo Co-Chair: Huan Zhao, Yuhui Cai						
		Tuesday	Jul. 21	14:00-16:00		
Title	Authors	Session	Room	Date	Start	End
Gamified Virtual Workshop for Cross Cultural Project Based Engineering Learning	Haochen Shi, Ying Hong, Zhuoxin Li, Zhanzhan Liu, Xiaozhen Lu, Wang Ge	TuS2.1	Classroom F 08	Jul.21	14:00	14:15
Constructing a Curriculum System for Emerging Aerospace Fields Based on Knowledge Graphs	Haochen Shi, Lei Qian, Ce Sheng, Shihong Chen, Xiaozhen Lu, Ning Li	TuS2.2	Classroom F 08	Jul.21	14:15	14:30
A GenAI-Enabled Instructional Framework for Creative Thinking Development: Design and Empirical Validation	Shijuan Gao, Xiaoyan Kui, Niefang Yu, Songlin Kang, Beiji Zou	TuS2.3	Classroom F 08	Jul.21	14:30	14:45
A Pedagogical Agent for Human-AI Cognitive Synergy in General AI Education	Yuan Fang, Weizhen Wang	TuS2.4	Classroom F 08	Jul.21	14:45	15:00
Contextual Calibration in Workshop-Informed AI-Assisted Lesson Planning for Chinese Language Teachers in Multicultural County High Schools	Kaiyuan Ni, Tengda Qi, Di Liu, Kexin Lu, Tian Tian, Guomin Zheng	TuS2.5	Classroom F 08	Jul.21	15:00	15:15

SSD-UAV: A Multi-Scale Dataset for Field Sugarcane Seedling Detection in UAV Imagery	Wenxing Hong, Kunhong Luo, Zhikai Lin, Duanqin Hong, Jihan Zhang	TuS2.6	Classroom F 08	Jul.21	15:15	15:30
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Invited Session: New Technologies, Methods, and Models in Computer Experiment Teaching

Chair: Shanshan Li

Co-Chair: Xuesong Fan

Tuesday

Jul. 21

14:00-16:00

Title	Authors	Session	Room	Date	Start	End
Integrating BERT-based Legal Information Extraction into NLP Course: A Case-Driven Teaching Reform for Computer Experiment Education	Hong Rao, Jie Liu, Qiyan Fu, Hanxiao Yi, Jingzhe Zhang	TuS4A.1	Classroom F 09	Jul.21	14:00	14:15
AI-Assisted Computer Network Experiment System	Chengbin Quan, Ninghan Zheng, Yijiang Jin, Shanshan Li, Youjian Zhao	TuS4A.2	Classroom F 09	Jul.21	14:15	14:30
Libraries Help Cultivate Training Students in Universities in the Era of Artificial Intelligence	Jinghan Liu	TuS4A.3	Classroom F 09	Jul.21	14:30	14:45
From Knowledge Coverage to Competency Achievement: Research and Exploration on AI-Empowered Teaching Reform in Digital Logic and Computer Organization	Wu Haijun, Gu Rong, Wu Ganshan, Tang Jie	TuS4A.4	Classroom F 09	Jul.21	14:45	15:00
Design and Empirical Study of an AI-Empowered Experimental Teaching Model for Emerging Engineering Education: Integrating Generative AI with the OBE Framework	Jie Li, Yitong Yang, Tianmiao Zhang, Liming Sun, Haiyang Sun	TuS4A.5	Classroom F 09	Jul.21	15:00	15:15
An LLM-Driven Firewall Policy Generation System for Educational Examinations	Junjun Chen, Zhongnan Fu, Xuesong Fan	TuS4A.6	Classroom F 09	Jul.21	15:15	15:30
Application of Sports Digital Intelligence Platform Based on Computer Vision Technology in Experimental Teaching	Xuesong Fan, Xiaolu Ji, Wenxin Li, Tianyu Chen, Yao Lu	TuS4A.7	Classroom F 09	Jul.21	15:30	15:45

Invited Session: Construction and Application of Educational Agents: A New Ecosystem for Human-Machine Collaborative Education

Chair: Yu Xiong

Tuesday

Jul. 21

16:20-18:20

Title	Authors	Session	Room	Date	Start	End
MUN-NegoBot: A Guided-Adversarial System for Chinese Students on Model United Nations Training via LLM-Powered Dialogues	Zhanzhan Liu, Zhilin Peng, Haochen Shi, Xiaoran Niu, Ning Li, Wang Ge	TuS3.1	Classroom F 07	Jul.21	16:20	16:35
A Unified Framework for Multi-Taxonomy Hierarchical Product Classification	Yazhuo Wang, Pei Wang, Yuchen Ran, Zongyu Fu, Ziyue Zhang, Wei Zhou	TuS3.2	Classroom F 07 (OL)	Jul.21	16:35	16:50
Research on AI-Empowered Operating Systems and Security Course Teaching	Hong Song, Xi Li, Ping Zhong	TuS3.3	Classroom F 07	Jul.21	16:50	17:05
MAPA: Enhance Cross-modal Attention with Modality Associative Prior for Visual Question Answering	Tao Li, Peng Zhang, Yuhao Kang, Anran Wang, Qi A, Sanyuan Zhao	TuS3.4	Classroom F 07	Jul.21	17:05	17:20
Drug Molecular Property Forecasting Using Deep Learning	Sena Seneviratne, Liyanage De Silva, Udaya Seneviratne, Aditya Abeysinghe	TuS3.5	Classroom F 07	Jul.21	17:20	17:35

Searching for the Protein-ligand Binding Sites with the Deep Learning	Sena Seneviratne, Udaya Seneviratne, Liyanage De Silva, Samantha Weerasinghe	TuS3.6	Classroom F 07	Jul.21	17:35	17:50
Is a Quantum Winter Coming?: Introduction to the Quantum Winter Index (QWI)	Attila Nagy, Yue Wu, Beatrix Fregan, Zoltan Rajnai	TuS3.7	Classroom F 07	Jul.21	17:50	18:05

Invited Session: New Technologies, Methods, and Models in Computer Experiment Teaching

Chair: Shanshan Li

Co-Chair: Xuesong Fan

Tuesday

Jul. 21

16:20-18:20

Title	Authors	Session	Room	Date	Start	End
Design and Implementation of a ReAct Agent-Powered Intelligent Classroom Generation and Teaching Platform	Qianye Wang, Huidong Qin, Xuesong Fan, Jia Yang, Hao Ma	TuS4B.1	Classroom F 08 (OL)	Jul.21	16:20	16:35
AI-Assisted Privacy-Aware Experimental Teaching Design for Software Engineering: A Case of Data Sharing Across Multiple University Systems	Yiming Peng, Yonghe Zhu, Chengjie Xing, Kejun Deng, Xuesong Fan	TuS4B.2	Classroom F 08	Jul.21	16:35	16:50
A Two-Stage Competence Transition Model for Non-CS Computational Thinking Education: From Code Meta-Competence to Vibe Coding	Xiaolu Ji, Yun Ma, Junjie Shang, Dashi Tang, Xuesong Fan, Junlin Lu	TuS4B.3	Classroom F 08	Jul.21	16:50	17:05
Open-Source System Localization as a Computer Experiment Teaching Model: A Case Study of CERN Indico at Peking University	Yonghe Zhu, Yiming Peng, Chengjie Xing, Kejun Deng, Chun Meng, Xuesong Fan	TuS4B.4	Classroom F 08 (OL)	Jul.21	17:05	17:20
Exploration of project-based digital logic course experiment for solving complex engineering problems	Shanshan Li, Chengbin Quan, Ninghan Zheng, Youjian Zhao	TuS4B.5	Classroom F 08	Jul.21	17:20	17:35
From Tool-Oriented to Companion-Oriented Design: Evolving LLM-Assisted Programming Education	Yanli Li, Jiayi Wang, Singa Xu, Ruibo An, Xiaolu Ji, Yun Ma	TuS4B.6	Classroom F 08	Jul.21	17:35	17:50
Digital Literacy Research and Its Implications for Experimental Teaching in Higher Education: A Review	Yangyang Wang, Yue Xing, Winbin Huang	TuS4B.7	Classroom F 08	Jul.21	17:50	18:05

Special Session: Data Science Best Paper Candidates Session

Chair: Yang Weng

Tuesday

Jul. 21

16:20-18:20

Title	Authors	Session	Room	Date	Start	End
Best Paper Candidates Session			Classroom F 09	Jul.21	16:20	18:20

Parallel Session: Data Science Technologies and Applications

Chair: Hiroki Takada

Wednesday

Jul. 22

08:00-10:00

Co-Chair: Yasuyuki Matsuura

Title	Authors	Session	Room	Date	Start	End
Intelligent AI-IoT Framework for Smart Water Resource Management in Urban and Rural Environments	Ainur Zhumadillayeva, Tariq Ahamed Ahanger, Saule Sagnayeva, Zhanuzak Abdibayev, Kanagat Dyussekeyev	TuS5.1	Classroom F 07	Jul.22	8:00	8:15

Why Spatial Inductive Bias Matters: A Controlled Study of KNN, MLP, and CNN on CIFAR-10	Zekun Xu,Yuhan Xie,Yuanjing Wang,Haiping Huang	TuS5.2	Classroom F 07	Jul.22	8:15	8:30
Electromagnetic Signal Classification Based on Multi-Domain Feature Extraction and Cross-Attention Fusion	Jiajia Chen, Qianqian Li, Jian Mao, Jiemin Zhang, Ni Tang	TuS5.3	Classroom F 07	Jul.22	8:30	8:45
Towards Long-Tail-Aware Knowledge Tracing: Robustness Analysis and Frequency-Based Adaptation	Lin Guo, Huangzhuo Liu, Ying An	TuS5.4	Classroom F 07	Jul.22	8:45	9:00
Predicting Academic Performance and Identifying Student Behavioral Patterns from Programming Keystroke Log Data	Jiaxin Yu, Yu Sheng, Guihua Duan, Ping Zhong	TuS5.5	Classroom F 07	Jul.22	9:00	9:15
Enhancing Learning Analytics via Bayesian Methods: A Systematic Review, Mathematical Frameworks, and Future Frontiers	Zhou Wang, Riquan Zhang, Hualing Liu	TuS5.6	Classroom F 07	Jul.22	9:15	9:30
Human-AI Co-Creative Intelligence via Semantic Market-State Manifold Analysis	Hiroki Takada	TuS5.7	Classroom F 07	Jul.22	9:30	9:45
Learning Complaint-Related Postural Features from Computer Work Posture Time Series Using Graph Variational AutoEncoder	Kohiki Nakane, Masumi Takada, Yasuyuki Matsuura, Hiroki Takada	TuS5.8	Classroom F 07	Jul.22	9:45	10:00

Parallel Session: Intelligent Learning, Analytics and Educational Systems -1

Chair: Jie Hu

Wednesday

Jul. 22

08:00-10:00

Title	Authors	Session	Room	Date	Start	End
Integrating Strategic Deception with Phased Development of Conscious-Like Behaviors	Dongxing Yu	TuS6.1	Classroom F 08	Jul.22	8:00	8:15
The effects of multilevel factors in technology-enhanced reading learning environments: Insights from explainable AI	Jie Hu	TuS6.2	Classroom F 08	Jul.22	8:15	8:30
Intelligent Educational Evaluation System in Laboratory-Based Engineering Education: Using Deep Learning Models to Assess Learning Outcomes	Haochen Shi, Zhanzhan Liu, Xiaoqing Huang	TuS6.3	Classroom F 08	Jul.22	8:30	8:45
Analytical Granularity Matters: Methodological Insights from Multi-modal Learning Log Analysis in Virtual Network Exercises	Yuichiro Tateiwa, Zhaonan Luo, Takahiro Uchiya, Chengjiu Yin	TuS6.4	Classroom F 08	Jul.22	8:45	9:00
An LLM-Enhanced Course Recommendation System for Micro-Credentials: Application to the Q.O.E. 100 Project at Kyushu University	Wei Shi, Yoshito Ogata, Saya Makihara, Asato Yoshinaga, Osamu Maruyama	TuS6.5	Classroom F 08	Jul.22	9:00	9:15
An LLM-Based Teaching Support System for C-STEAM Courses	Yancong Su, Jiangyi Wang, Wenyu Yang, Xiaonan Wang	TuS6.6	Classroom F 08	Jul.22	9:15	9:30

Invited Session: AI-Enhanced Digital Safeguards for Education in Marginalized Communities

Chair: Yu Weng

Co-Chair: Gulibanumu Kebaituli, Guixian Xu

Wednesday

Jul. 22

08:00-10:00

Title	Authors			Date	Start	End
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Exploration and Practice of Government-Industry-University Collaborative Training Model for Application-Oriented Cybersecurity Talents	Zhiqiang Ruan, Zizhu Lian, Renwan Bi, Yuting Zuo	WeS1.1	Online	Jul.22	8:00	8:15
Attack Path Modeling and Visualization for Cybersecurity Education: Case Study of APT Attacks	Chen Gu, Donghui Hu, Zhanglong Ye, Xiangping Li	WeS1.2	Online	Jul.22	8:15	8:30
A Four-Layer Funnel Method for University Data Classification and Grading Through Collaboration Between Large Language Models and Rule Engines	Fangfang Zhang, Li Li, Qianyi Wang	WeS1.3	Online	Jul.22	8:30	8:45
BMADS:Blockchain-based Multi-user Authorization Data Sharing	Fei Zhao, Zhuoting Han, Tianyi Zang	WeS1.4	Online	Jul.22	8:45	9:00
A Three-Dimensional Curriculum Update Framework for the Course of“Introduction to Computing” in the AI Era	Wenjuan Peng, Qingyong Li, Wei Zhou	WeS1.5	Online	Jul.22	9:00	9:15
A Learn–Introduce–Build Framework for Artificial Intelligence Curriculum Reform in Transportation-Oriented Universities	Chuan Wang, Wenjuan Peng, Wei Zhou, Qingyong Li	WeS1.6	Online	Jul.22	9:15	9:30

Parallel Session: Teaching Innovation and Curriculum

Chair: Xiangdong Li

Wednesday Jul. 22 08:00-10:00

Title	Authors	Session	Room	Date	Start	End
Three-Chain and Four-Dimension Digital Intelligence Empowered Talent Cultivation Model for Computer Majors in Application-Oriented Universities:Exploration and Practice	Zhaona Wang, Xuepeng Li, Lili Mu, Jianjie Li, Jin Dong	WeS2.1	Online	Jul.22	8:00	8:15
Resource Optimization for Aol-Driven Multi-UAV ISCC in Space-Air-Ground Integrated Networks	Ziyang Bai, Lianfen Huang, Lebing Pan, Zhibin Gao, Shanhao Zhan, Yuliang Tang	WeS2.2	Online	Jul.22	8:15	8:30
AI-Empowered Pedagogical Transformation of Machine Learning: A Systematic Framework for New Engineering Education	Kun Wang,Jin Liu	WeS2.3	Online	Jul.22	8:30	8:45
Research on a Dual-Base Collaborative Project-Based Teaching Model	Xiangdong Li, Zhe Pan, Yuefeng Cen, Yule Wu, Zhouxuan Chen, Gang Cen	WeS2.4	Online	Jul.22	8:45	9:00
Exploring an OBE- and AI-Integrated Teaching Model for Computer Network Course under Emerging Engineering Education	Jigang Wen, Kun Xie, Yuxiang Chen, Shiming He	WeS2.5	Online	Jul.22	9:00	9:15
Research on Practical Course Teaching Reform Based on Generative AI	Fang Li, Ming Yin, Pengcheng Xu	WeS2.6	Online	Jul.22	9:15	9:30
Research on a Human-AI Collaborative Teaching Model for Cultivating Computational Thinking	Pingzhang Gou, Yuheng Yao, Chuxun Wang	WeS2.7	Online	Jul.22	9:30	9:45

Parallel Session: Teaching Innovation and Curriculum

Chair: Wenxing Hong

Co-Chair:Binyue Cui

Wednesday Jul. 22 08:00-10:00

DCLC Expert Committee Meeting Artificial Intelligence Literacy	Wenxing Hong		Online	Jul.22	8:00	10:00
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Parallel Session : Intelligent Learning, Analytics and Educational Systems-2

Chair: Zheng Liu			Wednesday	Jul. 22	10:20-12:20	
Title	Authors	Session	Room	Date	Start	End
Integration of Human-Machine Collaboration into Mental Health and Life Education Curriculum: The Enhancing Effect on The Subjective Well-Being of Normal Students in Vocational Education	Jiefei Wang	WeS3.1	Online	Jul.22	10:20	10:35
Bridging Knowledge and Problem-solving: A Comprehensive Pedagogical Framework Integrating Blended and Research-based Learning in Higher Education	Peipei Gao, Mingxiao Lu, Hong Zhao, Huigang Liu	WeS3.2	Online	Jul.22	10:35	10:50
A Tool-Orchestrated Human-in-the-Loop Framework for Generative AI-Supported University Teaching	Meiqi Zhong, Linjing Wei, Henghui Mo	WeS3.3	Online	Jul.22	10:50	11:05
Research on Intelligent Course Recommendation System for Universities: Integrating Auto-Completed Knowledge Graph with GNN-LLM Collaborative Framework	Zhouxuan Chen, Qianmeng Ruan, Gang Cen, Yuefeng Cen	WeS3.4	Online	Jul.22	11:05	11:20
Integrating Knowledge Graph Semantics and Multi-Prototype Representations for Personalized Instructional MOOC Video Recommendation	Wentian Zhao, Tian Song, Zhixin Ma	WeS3.5	Online	Jul.22	11:20	11:35
Supporting Manchu Language Learning through Multimodal AI: Design and Evaluation of an AI-Assisted Learning Environment	Yuan Peng, Jiaying Wang, Zhiquan Yuan, Yuru Wang	WeS3.6	Online	Jul.22	11:35	11:50
Multimodal Behavioral Trajectory Learning for Adaptive Programming Assistance	Pengfei Huang, Lei Yuan, Haochen Shi	WeS3.7	Online	Jul.22	11:50	12:05
Parallel Session: Intelligent Learning, Analytics and Educational Systems-3						
Chair: Yasuyuki Matsuura			Wednesday	Jul. 22	10:20-12:20	
Title	Authors	Session	Room	Date	Start	End
Climate-Responsive Multi-Horizon Electricity Load Forecasting via Large-Small Synergistic Learning	Xiaorui Qian, Xiangpeng Zhan, Huawei Hong, Kai Xiao, Ying Qu, Yuying Chen	WeS4.1	Online	Jul.22	10:20	10:35
Human-AI Co-Thinking: Mechanisms of AI-Empowered Language Deep Learning	Tengda Qi, Zihan Wang, Mingyang Liu, Bo Sun, Jun He, Jie Chen	WeS4.2	Online	Jul.22	10:35	10:50
Small-Sample Agricultural Product Price Forecasting under External Shocks Based on Entropy Weighting and OOF-SHAP	Chenyang Li, Yuefeng Cen, Yawen Yu, Jiahui Huang, Gang Cen	WeS4.3	Online	Jul.22	10:50	11:05
AI-Assisted Course Dependency Modeling Driven by Generative Semantic Understanding	Shengguo Kang, Jiwei Qin, Wendong Zhang	WeS4.4	Online	Jul.22	11:05	11:20
Multi-device Learning Scenario Model: A Feasible Organizational Mechanism for Spatial Coordination	Hanhui Xu, Tianyu Huang, Yuting Chen, Hang Zhang, Jiang Wu	WeS4.5	Online	Jul.22	11:20	11:35

A Validation-Oriented Interpretable Ensemble Learning Approach for Student Performance Prediction	Shen Peng, Rui Wang, Yunchao He	WeS4.6	Online	Jul.22	11:35	11:50
TRACE: A Task-Oriented Framework for Configuring Educational Agents in Human-AI Collaborative Learning	Yutong Li, Zihan Deng, Tianhao Li	WeS4.7	Online	Jul.22	11:50	12:05
Parallel Session: AI General Education						
Chair: Yuhui Cai			Wednesday	Jul. 22	10:20-12:20	
Title	Authors	Session	Room	Date	Start	End
Building a Synergistic Cultivation Model: Articulation and Mutual Empowerment between High School and University in Developing Top-Innovation Talent in AI	Haowen Chen, Xin Wang	WeS5.1	Online	Jul.22	10:20	10:35
AI-Enhanced Digital Logic Design Education based on Progressive Teacher-AI Collaboration Learning	Yufeng Xiao, Ningbo Zhu, Zixing Zhang, Huan Zhao	WeS5.2	Online	Jul.22	10:35	10:50
A Comparative Teaching Case of Intelligent Decision-Making in Maze Path Planning: From Omniscience to Exploration	Yuhui Cai, Juan Luo, Qianqian Chen	WeS5.3	Online	Jul.22	10:50	11:05
Construction and Practice of a Competition-Driven Talent Cultivation Model for Embedded AI	Qi Zhou, Xinyu Chen, Rui Wen, Mingwei Wu, Xiang Shi, Gang Cen	WeS5.4	Online	Jul.22	11:05	11:20
Exploration and Practice of the Project-Driven Interdisciplinary Technology-Enabled Active Learning (PI-TEAL) Teaching Model	Hanbo Ji, Chaojie Tian, Taoji Chen, Junxin Ye, Zhili Nie, Mingwei Wu	WeS5.5	Online	Jul.22	11:20	11:35
SE-CloudLab: Operationalizing Delivery-Oriented Software Engineering Pedagogy through a Template-Driven Containerized PaaS	Yuhang Liu, Ning Jiang, Ling Yuan, Zhikun Zhang	WeS5.6	Online	Jul.22	11:35	11:50
Design and Practice of a Hierarchical Model for AI General Education in Arts Majors from the Perspective of Human-AI Collaboration	Yu Niefang, Kui Xiaoyan, Li Xiaomei, Peng Xiaoning	WeS5.7	Online	Jul.22	11:50	12:05
Parallel Session: Computer Science and Technology						
Chair: Jing Wang			Wednesday	Jul. 22	10:20-12:20	
Title	Authors	Session	Room	Date	Start	End
A Neural Network Framework Based on Lua and OpenCL	Nannan Wu	WeS6.1	Online	Jul.22	10:20	10:35
Research on Artificial Intelligence Personalized Support Based on Coping Styles and Mental Health Status of Family Caregivers of Children with Autism	Weijun Huang, Jiefei Wang	WeS6.2	Online	Jul.22	10:35	10:50
GraF-AKT: A Knowledge Tracing Approach Fusing Knowledge Graphs and Its Multi-Agent Platform Application	Wujun Yan, Zexi Zhao, Jiaqi Qiu, Hanyue Yang, Yixin Ren	WeS6.3	Online	Jul.22	10:50	11:05
Research on an Educational Agent Platform Based on UMAL-CT and Large Language Models	Wujun Yan, Yixin Ren, Hanyue Yang, Jiaqi Qiu, Zexi Zhao	WeS6.4	Online	Jul.22	11:05	11:20
Reliability-Gated Reconstruction for Multimodal Prompt Learning with Missing Modalities	Kun Ding, Ziyang Shang, Bin Wang, Jing Wang, Attila Pandur, Yu Xiong	WeS6.5	Online	Jul.22	11:20	11:35

Digital Restoration and Immersive Interaction Research on AI-Based Reconstruction of Damaged Historic Architecture	Jiayi Pan	WeS6.6	Online	Jul.22	11:35	11:50
Design and Implementation of a Metadata Management System for University Data Platforms	Fangfang Zhang, Li Li, Qianyi Wang	WeS6.7	Online	Jul.22	11:50	12:05
Parallel Poster Session			Wednesday	Jul. 22	14:00-16:00	
Title	Authors	Session	Room	Date	Start	End
Context-Based Engineering: Intent Architecture Beyond Prompt Engineering for AI-Augmented Algorithmic Education	Alexander Belyaev	WeP1.1	Classroom F 07 Online	Jul.22	14:00	14:15
Computerized Adaptive Testing: Themes, Developmental Trends, and Emerging Hotspots	Qianyi Zhang, Shuhan Zhang	WeP1.2	Classroom F 07 Online	Jul.22	14:15	14:30
PCA-based Defense Against Embedding Inversion and User History Leakage in Recommendation Systems	Shivam Yadav, Subhav Kumar, Natesha B V	WeP1.3	Classroom F 07 Online	Jul.22	14:30	14:45
From AI Substitution to AI Augmentation: Construction and Practice of the Intelligence Cube Teaching Model	Haiying Che	WeP1.4	Classroom F 07 Online	Jul.22	14:45	15:00
Parallel Poster Session			Wednesday	Jul. 22	14:00-16:00	
Title	Authors	Session	Room	Date	Start	End
Task Graph InFormed (TGIF) Robotic Assembly Task- planning	Spencer Perkins, Hsien-I Lin	WeP2.1	Classroom F 07 Online	Jul.22	14:00	14:15
A Deployment-Oriented Scoping Review of SLMs and LLMs in Energy Systems	Mohammad Reza Shadi, Hamid Mirshekali, Hamid Reza Shaker	WeP2.2	Classroom F 07 Online	Jul.22	14:15	14:30
From Pipe-Level Ranking to Street/Area Package Selection: A Pareto Optimization Framework for District Heating Maintenance/Renovation Planning	Maryamsadat Tahavori	WeP2.3	Classroom F 07 Online	Jul.22	14:30	14:45
ARCD: Attentive Relational Cognitive Diagnosis for Closed-Loop Personalized Learning	Mohammed Al Hasani, Haiying Che, Rakhmonberdi Khajiev	WeP2.4	Classroom F 07 Online	Jul.22	14:45	15:00
Lab Tutor: Teacher-Governed Curriculum-Market Alignment with Course Knowledge Graphs	Rakhmonberdi Khajiev, Haiying Che, Al Hasani Mohammed	WeP2.5	Classroom F 07 Online	Jul.22	15:00	15:15
A Hybrid Approach for Quarterly Foreign Direct Investment Forecasting in Sri Lanka	Vinuri Kariyawasam, Ishara Umayangana, Binura Dilshan, Sanjuka Ravishan, Bhagya Nathali Silva, Jenny Krishara	WeP2.6	Classroom F 07 Online	Jul.22	15:15	15:30

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