香港教育大學
The Education University of Hong Kong

BESC2025

The 12th International Conference on Behavioural and Social Computing

Hong Kong, China | 16-18 October 2025

◆ Co-Organizer ◆

The Education University of Hong Kong

Welcome from the BESC 2025 Program Committee

As the program chairs of the 12th International Conference on Behavioural and Social Computing, it is our great pleasure to welcome you. The conference will be held in Hong Kong, China, 16–18 October 2025, hosted by The Education University of Hong Kong.

The goal of BESC is to provide a forum that brings together academic researchers and industry practitioners from artificial intelligence, computational social sciences, natural language processing, business and marketing, and behavioural and psychological sciences. This gathering enables participants to present updated research efforts and progress on foundational and emerging interdisciplinary topics, exchange new ideas, and identify future research directions. After the dedicated work of the Program Committee, 110 papers were accepted for presentation at the conference.

We would like to thank all the Program Committee members for their diligent efforts in completing the review tasks. Their collective work made it possible to attain quality reviews for all submissions within a few weeks. Their diverse expertise in each research area has helped us create an exciting program. Their comments and advice helped authors improve the quality of their papers and gain deeper insights.

We thank Guandong Xu, Jianwei Zhang, Jianquan Liu, Hao Chen, whose professional assistance was invaluable in the production of the proceedings. Great thanks should also go to the authors and participants for their tremendous support in making this event a success. Besides the technical program, this year BESC offers different experiences to the participants, including workshops, tutorials, demonstration, etc. We hope you enjoy the conference.

October 2025

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Program at a Glance

Time	Session		
Thursday, 16 October 2025			
09:00-9:50	**Tutorial 1:** Model Compression via Hyperfunction **Speaker:** Dr. Fenglei Fan **Chairs:** Dr. Dan Lu (Room C-LP-06)	**The International Workshop on Artificial Intelligence for Law (WAIL 2025)** **Chair:** Prof. Juan Xu (Room C-LP-04)	
09:50-10:40	**Tutorial 2:** From Degradation to Perception: Photo Restoration and Quality Assessment **Speaker:** Dr. Weiwei Cai **Chairs:** Dr. Dan Lu (Room C-LP-06)		
10:40-11:00	**Coffee Break**		
11:00-12:00	**Tutorial 3:** Hot Topic Diffusion Prediction in Large Social Networks under Complex Public Opinion Environment (11:00-11:50) **Speaker:** Dr. Yajun Yang **Chairs:** Dr. Yingnan Zhao (Room C-LP-06)	**Intelligent Models for Language and Cross-Cultural Education (IMLCCE 2025)** **Chair:** Prof. Yuanyuan Mu (Room C-LP-04)	
12:00-13:00	**Lunch Break** (Chinese Restaurant, Podium Level, Block B4-C)		
14:00-14:50	**Tutorial 4:** Recent Advances in Worker Selection: From Social Diffusion to Federated Learning **Speaker:** Dr. Jianxiong Guo **Chairs:** Dr. Yingnan Zhao (Room C-LP-06)	**The International Symposium on Machine Learning and Social Computing (MLSC2025)** **Chair:** Prof. Jinhua Tan (Room C-LP-04)	**Doctoral Consortium** **Chair:** Prof. Lin Li & Dr. Elena Vlahu-Gjorgievska (Room C-LP-18)
14:40-15:00	**Break**		
15:00-18:00	**CCF YOCSEF Activity** **Panelist:** Prof. Xiaofeng Meng, RUC Prof. Li Chen, HKBU Prof. Tianyong Hao, SCNU Prof. Lin Li, WHUT (Room C-LP-06)	**The International Symposium on Machine Learning and Social Computing (MLSC2025)** **Chair:** Prof. Jinhua Tan (Room C-LP-04)	
18:00-18:30	Take the shuttle bus to Hong Kong Science Park		
18:30-20:30	**Welcome Reception** (Hoi Won Wui, Shop 101, 1/F, 1W Core Building 2, 1 Science Park E Ave, Hong Kong Science Park, Sha Tin)		

Program at a Glance

Time	Session	
Day 2: Friday, 17 October 2025		
09:00-09:20	**Opening Ceremony** **Chair:** Prof. Qing Li (E-LP2-01 Sports Hall)	
09:20-09:30	Group Photo (E-LP2-01 Sports Hall)	
09:30-10:20	**Keynote 1: Cyber-Physical-Social Intelligence** **Speaker:** Prof. Laurence T. Yang, Zhengzhou University, China **Chair:** Prof. Tianyong Hao (E-LP2-01 Sports Hall)	
10:20-10:40	**Coffee Break**	
10:40-12:00	**Technical Session 1:** AI for Social Good **Chair:** Dr. Zhiyuan Wen (Room E-LP2-20)	**Technical Session 2:** Social Media Analysis **Chair:** Dr. Kaixi Hu (Room E-LP2-21)
12:00-14:00	**Lunch Break** (Chinese Restaurant, Podium Level, Block B4-C)	
14:00-14:50	**Keynote 2: Data Analysis Traceability in the Era of Real-Time AI** **Speaker:** Prof. Hiroyuki Kitagawa, University of Tsukuba, Japan **Chair:** Prof. Raian Ali (Sports Hall)	
14:50-15:50	**Technical Session 3:** Recommendation **Chair:** Dr. Dan Lu (Room E-LP2-20)	**Technical Session 4:** Interdisciplinary Study (Part 1) **Chair:** Yuhan Zou (Room E-LP2-21)
15:50-16:10	**Coffee Break**	
16:10-17:10	**Technical Session 5:** Artificial Intelligence **Chair:** Dr. Yifan Zhu (Room E-LP2-20)	**Technical Session 6:** Interdisciplinary Study (Part 2) **Chair:** Dr. Yan Mu (Room E-LP2-21)
		Demo Session **Chair:** Dr. Xin Li (Outside Sports Hall)
17:10-18:30	**Panel Discussion: Challenges & Opportunities for Academic & Industrial Education in the New Era of GenAI & Agentic AI** **Moderator:** Dr. Jianquan Liu, NEC Corporation, Japan **Panelists:** Prof. Chee Kit Looi, The Education University of Hong Kong, Prof. Raian Ali, Hamad Bin Khalifa University, Qatar Prof. Masakazu Iwamura, Osaka Metropolitan University, Japan Dr. Elpida Tzafestas, University of Athens, Greece Dr. Runze Wu, NetEase Inc., China Dr. Xin Li, iFLYTEK, China (E-LP2-01 Sports Hall)	
18:30-19:15	Take the shuttle bus to Sai Kung	
19:15-21:30	**Banquet** (Hung Kee Seafood Restaurant, Shop 6 & 9-10, G/F, Siu Yat Building, 1 Sai Kung Hoi Pong Square, Sai Kung)	

Program at a Glance

Time	Session	
Day 3: Saturday, 18 October 2025		
09:00-09:50	**Keynote 3: From Trustworthy AI to AI Ethics and Governance** **Speaker:** Prof. Xin Yao, Lingnan University, Hong Kong, SAR, China **Chair:** Prof. Guandong Xu (E-LP2-01 Sports Hall)	
09:50-10:20	**Technical Session 7:** Behavior & Mobility Modeling **Chair:** Dr. Kaize Shi (Room E-LP2-20)	**Invited Talk:** **Speaker:** Prof. Masakazu Iwamura, Osaka Metropolitan University, Japan **Chair:** Dr. Jianquan Liu (Room E-LP2-21)
10:20-10:40		**Technical Session 8:** AI for Healthcare (Part 1) **Chair:** Dr. Jianquan Liu (Room E-LP2-21)
10:40-11:00	**Coffee Break**	
11:00-12:00	**Technical Session 9:** Recommendation (Part 2) **Chair:** Dr. Nengjun Zhu (Room E-LP2-20)	**Technical Session 10:** AI for Healthcare (Part 1) **Chair:** Dr. Junceng Ye (Room E-LP2-21)
12:00-14:00	**Lunch Break** (Chinese Restaurant, Podium Level, Block B4-C)	
14:00-14:50	**Keynote 4: Ties-of-Trust in AI : Unravel the Links Between** Human Judgment and AI Harms **Speaker:** Prof. Athena Vakali, Aristotle University, Greece **Chair:** Prof. Lin Li (E-LP2-01 Sports Hall)	
14:50-15:30	**Technical Session 11:** Anomaly Analysis **Chair:** Dr. Shizhuo Deng (Room E-LP2-20)	**Technical Session 12:** AI for Education (Part 1) **Chair:** Dr. Shiqing Wu (Room E-LP2-21)
15:30-15:50	**Coffee Break**	
15:50-16:30	**Technical Session 13:** AI for Molecular Modeling and Drug **Chair:** Prof. Lin Li (Room E-LP2-20)	**Technical Session 15:** AI for Education (Part 2) **Chair:** Dr. Daner Sun (Room E-LP2-21)
16:30-17:00	**Technical Session 14:** Knowledge Engineering **Chair:** Dr. Yakun Chen (Room E-LP2-20)	
17:00-17:20	**Closing and Award Ceremony** **Chair:** Prof. Guandong Xu (E-LP2-01 Sports Hall)	

Friday, 17 October 2025 09:30-10:20 Sports Hall **Keynote Speaker**

TITLE

Cyber-Physical-Social Intelligence

SPEAKER

Prof. Laurence T. Yang
FCAE, FEIC, MAE, MRAE, MNAAI, FIEEE, FIET
Zhengzhou University, China

ABSTRACT

The booming growth and rapid development in embedded systems, wireless communications, sensing techniques and emerging support for cloud computing and social networks have enabled researchers and practitioners to create a wide variety of Cyber-Physical-Social Systems (CPSS) that reason intelligently, act autonomously, and respond to the users' needs in a context and situation-aware manner, namely Cyber-Physical-Social Intelligence. It is the integration of computation, communication and control with the physical world, human knowledge and sociocultural elements. It is a novel emerging computing paradigm and has attracted wide concerns from both industry and academia in recent years. This talk will present our latest research on Cyber-Physical-Social Intelligence. Corresponding case studies in some typical applications will be shown to demonstrate the feasibility and flexibility.

BIO

Laurence T. Yang got his BE in Computer Science and Technology and BSc in Applied Physics both from Tsinghua University, China and PhD in Computer Science from University of Victoria, Canada. He is the Academic Vice-President and Dean of School of Computer Science and Artificial Intelligence, Zhengzhou University, China. His research includes Cyber-Physical-Social Intelligence. He has published 500+ papers in the above area on top IEEE/ACM Transactions with total citations of 45000+ and H-index of 1058 including 8 and 44 papers as top 0.1% and top 1% highly cited ESI papers, respectively.

His recent honors and awards include the member of US National Academy of Artificial Intelligence (2025), a foreign member of Russian Academy of Engineering (2024) and a member of Academia Europaea, the Academy of Europe (2021), the John B. Stirling Medal (2021) from Engineering Institute of Canada, IEEE Sensor Council Technical Achievement Award (2020), IEEE Canada C. C. Gotlieb Computer Medal (2020), Clarivate Analytics (Web of Science Group) Highly Cited Researcher (2019, 2020, 2022, 2023, 2024), Fellow of Institution of Engineering and Technology (2020), Fellow of Institute of Electrical and Electronics Engineers (2020), Fellow of Engineering Institute of Canada (2019), Fellow of Canadian Academy of Engineering (2017), etc.

Friday, 17 October 2025 14:00-14:50 Sports Hall **Keynote Speaker**

TITLE

Data Analysis Traceability in the Era of Real-Time AI

SPEAKER

Prof. Hiroyuki Kitagawa
University of Tsukuba, Japan

ABSTRACT

Big data analysis has become routine across many domains, including behavioral and social computing, where knowledge discovery and decision-making increasingly rely on diverse analytical methods. As a result, ensuring the reliability of analyses and clarifying why particular results are obtained has become critically important. At the same time, data analysis pipelines are growing ever more diverse and complex. Advanced analyses powered by machine learning and AI models, as well as real-time analytics that process events across the physical and cyber domains, have become commonplace.

Data traceability is a key technology for revealing which input data and processing steps lead to a given analytical result. In the database research community, this concept has long been studied under the notions of lineage and provenance. Yet, existing methods fall short when faced with the demands of complex analyses involving machine learning and AI, or the requirements of real-time analytics. In AI-driven contexts, conventional techniques often fail to explain the rationale behind results. In real-time settings, traditional techniques frequently impose substantial overhead that degrades system performance.

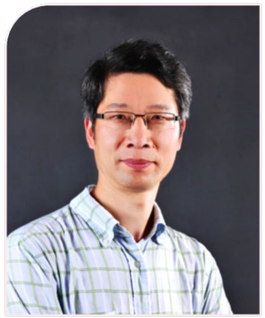
This talk presents the speaker's recent research on advancing data traceability. First, it introduces Augmented Lineage, a new form of traceability designed for complex analyses involving machine learning and AI, and discusses its realization in database and stream processing systems. Next, it describes LPStream, a system that ensures traceability of required outputs in stream processing while significantly reducing the impact on performance. Finally, the talk highlights open research challenges and future directions.

Friday, 17 October 2025 14:00-14:50 Sports Hall **Keynote Speaker**

BIO

Hiroyuki Kitagawa received the B.Sc. degree in physics and the M.Sc. and Dr.Sc. degrees in computer science, all from the University of Tokyo, in 1978, 1980, and 1987, respectively. He joined Institute of Information Sciences and Electronics, University of Tsukuba, in 1988. He is currently a Specially Appointed Professor at International Institute for Integrative Sleep Medicine, University of Tsukuba. He is also a Collaborative Fellow at Center for Computational Sciences, University of Tsukuba, a Visiting Professor at Kanazawa University, and an Invited Researcher at Intelligent Platforms Research Institute, National Institute of Advanced Industrial Science and Technology (AIST). His research interests span databases, data engineering, big data, and data mining, with particular emphasis on stream processing, sleep data analysis, information integration, and data analysis in medical and scientific domains. He has authored more than 300 publications in international journals and refereed conference proceedings. He is a Fellow of IEICE (The Institute of Electronics, Information and Communication Engineers), a Fellow of IPSJ (Information Processing Society of Japan), and an Honorary Member of DBSJ (The Database Society of Japan). Before joining University of Tsukuba, he was a research staff member in NEC Corporation, Tokyo. He was a visiting scholar of Carnegie Mellon University (2001-2002), and of University of Maryland (1984-1985). He has held several leadership positions, including Provost of Graduate School of Systems and Information Engineering, University of Tsukuba (2015-2018), President of DBSJ (2014-2016), Chairperson of ACM SIGMOD Japan Chapter (2003-2007), Chairperson of the IEICE Special Interest Group on Data Engineering (1999-2001), and an Associate Member of the Science Council of Japan (2011-2023). He is a member of ACM, IEEE, Japan Society of Sleep Research, and JSSST.

Saturday, 18 October 2025 09:50-09:50 E-LP2-01 Sports Hall **Keynote Speaker**



TITLE

From Trustworthy AI to AI Ethics and Governance

SPEAKER

Prof. Xin Yao
FIEEE
Lingnan University, Hong Kong SAR, China

ABSTRACT

Trustworthiness is a critical issue in artificial intelligence (AI), especially for real-world applications. It is impossible to apply AI in the real world without its being trustworthy. However, the connotation and extension of trustworthiness are not entirely clear. There has not been a single definition that is accepted by all researchers. Nevertheless, the vast majority of researchers agree that AI trustworthiness should include at least accuracy, reliability, robustness, safety, security, privacy, fairness, transparency, controllability, maintainability, etc. This talk starts from a brief recall of trustworthy systems in the literature. It tries to understand any potential difference between classical trustworthy systems and modern-day trustworthy AI. It argues that AI ethics is a crucial part of trustworthy AI, which was not featured in classical trustworthy systems. The talk then presents a short summary of AI ethics, and examines the fairness and explainability issues of machine learning models. It demonstrates that many aspects of AI ethics, such as fairness and explainability, are inherently multi-dimensional. There are many dimensions to ethical principles like fairness and explainability, which cannot be defined by any single metrics. Multi-objective thinking is essential in AI ethics. This talk will illustrate how multi-objective evolutionary learning can be used to enhance fairness and explainability of machine learning models.

BIO

Xin Yao is the Vice President (Research and Innovation) and Tong Tin Sun Chair Professor of Machine Learning at Lingnan University, Hong Kong, China. He is an IEEE Fellow and a Fellow of Hong Kong Academy of Engineering. He served as the President (2014-15) of IEEE CIS and the Editor-in-Chief (2003-08) of IEEE Transactions on Evolutionary Computation. His major research interests include evolutionary computation, machine learning and AI ethics and governance. His work won the 2001 IEEE Donald G. Fink Prize Paper Award; 2010, 2016 and 2017 IEEE Transactions on Evolutionary Computation Outstanding Paper Awards; 2011 IEEE Transactions on Neural Networks Outstanding Paper Award; 2010 BT Gordon Radley Award for Best Author of Innovation (Finalist); and other best paper awards at conferences. He received the 2012 Royal Society Wolfson Research Merit Award, the 2013 IEEE CIS Evolutionary Computation Pioneer Award, and the 2020 IEEE Frank Rosenblatt Award. He is a Clarivate Highly Cited Researcher in 2016, 2020, and 2022-25.

Saturday, 18 October 2025 14:50-14:50 E-LP2-01 Sports Hall **Keynote Speaker**

TITLE

Ties-of-Trust in AI : Unravel the Links Between Human Judgment and AI Harms

SPEAKER

Prof. Athena Vakali
Aristotle University, Greece

ABSTRACT

AI, a human generated technology, has emerged not only as a human companion and facilitator but as a (semi-) autonomous decision maker. Unfortunately, critical AI-driven decision-making, in multiple domains such as in hiring, loans checks, criminal justice and healthcare, are heavily critiqued for unjust outcomes which harm individuals and groups. This keynote talk will bring forward the need for end-to-end exploration of AI harms, from their actual origins and up to the AI harmful instances. By bridging cognitive science, AI computational pipelines, and AI ethical principles, this talk will offer insightful evidence on how to recognize the role of heuristics-driven actions which lead to harmful AI outcomes. Specific real-world scenarios will be revisited under a systematic approach framed in risk assessment models such as the Bowtie structure, to connect human-side cognitive heuristics and AI harms pathways, and to offer credible guidelines for ethical interventions and choices.

BIO

Athena Vakali is a professor at the School of Informatics, Aristotle University, Greece, where she leads the Laboratory on Data and Web science. She holds a PhD degree in Informatics (Aristotle University), a MSc degree in Computer Science (Purdue University, USA), and BSc degree in Mathematics. Her current research interests include Data Science topics with emphasis on data and online social networks mining and analytics, next generation Internet applications and sensing analytics, and on online sources data management on the cloud, the edge and decentralized settings. Prof. Vakali has published over than 220 papers in refereed journals and Conferences and she is Associated Editor in ACM Computing Surveys Journal, in the editorial board of the “Computers & Electrical Engineering" Journal, and ICST Transactions on Social Informatics (her publications received over 12,115 citations with h-index=45 according to gscholar). She has coordinated and participated in more than 25 research projects in EU. She has acted as keynote lecturer/speaker at several prestigious Conferences and events such as : RESET MCSA’24 summer school; ACM womENcourage 2023, etc. She has co-chaired major Conferences Program Committees such as: ACM Gender Equality Summit (Greek Chapter) 2022, PC co-chair at the ACM/IEEE Web Intelligence Conference 2019, the EU Network of Excellence 2nd Internet Science Conference (EINS 2015), 15th Web Information Systems Engineering (WISE 2014), etc. More info: https://datalab.csd.auth.gr/avakali/

Saturday, 18 October 2025 09:50-10:20 E-LP2-21 **Invited Speaker**

TITLE

Photography for People with Visual Impairments: From Taking the Shot to Tactile Understanding

SPEAKER

Prof. Masakazu Iwamura
Osaka Metropolitan University, Japan

ABSTRACT

It is not widely recognized that people with visual impairments (PVI) want to take their own photographs. This talk presents a practical pathway that enables both taking the shot and understanding the photo by touch. We first introduce VisPhoto, which captures a 360° image at the shutter press and then produces the final photograph as the user desires, effectively removing the need for precise framing at capture time. The workflow combines object detection to surface candidate subjects and speech recognition to capture user intent before generating the final image. We then show how a single photograph can be transformed into a 2.5D tactile relief, enabling users to experience what the image depicts. Monocular depth estimation, a computer vision technique, provides global 3D structure, while luminance-to-height mapping encodes planar details, such as textures and text. The resulting height map is fabricated on a 3D printer as a tactile plate. As an extension, depth-guided detection of foreground meshes with inpainting helps rebuild continuous, easy-to-explore relief surfaces. Together, these components make it feasible for PVI to take photographs independently and understand them through tactile exploration.

BIO

Masakazu Iwamura (Member, IEEE) received the B.E., M.E., and Ph.D. degrees in engineering from Tohoku University, Japan, in 1998, 2000, and 2003, respectively. He is currently a Professor with the Department of Core Informatics, Graduate School of Informatics, Osaka Metropolitan University. His research interests include text and object recognition and visually impaired assistance. He has received numerous awards, including the IAPR/ICDAR Young Investigator Award, in 2011, the Best Paper Awards of IEICE, in 2008 and 2021, the IAPR/ICDAR Best Paper Award, in 2007, the IAPR Nakano (Best Paper) Award, in 2010, the ICFHR Best Paper Award, in 2010, the MVA Best Paper Award, in 2017, and the SIGACCESS Best Paper Award, in 2023. He served as the Vice-Chair of the IAPR Technical Committee 11 (Reading Systems), from 2016 to 2018, an Associate Editor of International Journal of Document Analysis and Recognition, from 2013 to 2023, and an Associate Editor and an Associate Editor-in-Chief of IEICE Transactions on Information and Systems, from 2017 to 2021 and from 2021 to 2023, respectively.

Thursday, 16 October 2025 09:00-09:50 Room C-LP-06 **Tutorial 1**

Tutorial 1: Model compression via Hyperfunction

Deep learning, represented by deep artificial neural networks, has been dominating numerous important research fields in the past decade. Although the invention of the neural network was to mimic a human's brain, the current development of deep learning is not primarily driven by the increasingly growing understanding to the brain. Brain is the most intelligent system we have ever known so far, although the brain remains vastly undiscovered, it is clear that the existing deep learning still goes far behind human brain in many important aspects such as efficiency, interpretability, memory, etc. Given the incredible capability of the human brain, we argue that neuroscience can always offer support for deep learning as a think tank and a validation means. In this talk, we discuss drawing the mechanism of genome bottleneck into deep learning, with an emphasis on solving problems in model compression, which is to facilitate the deployment of large models.

SPEAKER

Dr. Fenglei Fan

City University of Hong Kong, Hong Kong SAR, China

BIO

Dr. Fenglei Fan is currently an Assistant Professor with Department of Data Science, City University of Hong Kong. He is the Chief Scientist of the Huawei Key Project. His primary research interests lie in NeuroAI and its applications in model compression. He was the recipients of the IBM AI Horizon Scholarship, the 2021 International Neural Network Society Doctoral Dissertation Award, and He won OlympusMons Pioneering Award, a prestigious award in the field of storage. He has one paper selected as one of few 2024 CVPR Best Paper Award Candidates, one won the IEEE Nuclear and Plasma Society IEEE TRPMS Best Paper Award, and one ESI highly cited paper. He organized special issues in journals like IEEE TRPMS, presented three tutorials in AAAI2023, IJCNN25, and WWW2025, and served as (senior) program committee members in AAAI and IJCAI.

Thursday, 16 October 2025 09:50-10:40 Room C-LP-06 **Tutorial 2**

Tutorial 2: From Degradation to Perception: Photo Restoration and Quality Assessment

Image restoration is a fundamental task in computer vision, with photo restoration drawing increasing attention due to its high practical value. This report first highlights the key challenges in photo restoration, including handling scratched regions, developing discriminative models for diverse degradation types, and the limited availability of annotated datasets. To address these challenges, we construct dedicated datasets for photo restoration and propose several solutions: a contextual-assisted scratched photo restoration method, a hierarchical damage correlation framework for old photo restoration, and a semi-supervised approach that leverages important samples for old photo restoration. Moreover, for underwater image scenarios, we present a novel image quality assessment method that combines physical priors with human perceptual factors. Extensive quantitative and qualitative experiments verify the effectiveness and superiority of the proposed methods.

SPEAKER

Dr. Weiwei Cai

The Hong Kong Polytechnic University, Hong Kong SAR, China

BIO

Weiwei Cai is currently a Postdoctoral Fellow at The Hong Kong Polytechnic University. She obtained her Ph.D. degree in Computer Science and Engineering from South China University of Technology in 2024. Her research focuses on computer vision, image processing, computer graphics and deep learning, with a particular emphasis on developing advanced algorithms for visual understanding and intelligent image analysis. Dr. Cai has published her work in prestigious journals and conferences, including IEEE TCSVT, IEEE TMM, IEEE TIP, Information Fusion, IJCAI, and ICASSP. From September 2025 to September 2027, she is supported by the Hong Kong Postdoctoral Matching Scheme. She actively contributes to the academic community by serving as a reviewer for leading journals and conferences, such as IEEE TCSVT, Pattern Recognition, CVPR, ECCV, and ICASSP.

Thursday, 16 October 2025 11:00-11:50 Room C-LP-06 **Tutorial 3**

Tutorial 3: Hot Topic Diffusion Prediction in Large Social Networks under Complex Public Opinion Environment

As an important medium for information propagation, the study of public opinion propagation mechanism on social networks can help people deeply understand the whole process of the outbreak, diffusion and extinction of public opinion events, s thereby significantly enhancing the governance ability of governments and enterprises against false or undesirable content. In the real world, the spread of public opinion events is profoundly influenced by the intricate public opinion environment. Within the complex public opinion environment, multifaceted factors such as user social relationships, individual preferences, characteristics of public opinion events, pivotal users, sphere effects, and various complex public opinion field effects collectively affect the propagation process of public opinion events. In this talk, we introduce recent studies on predicting the public opinion event propagation of large social networks under the complex public opinion field environment. These studies mainly encompass three aspects: inference of users' propagation preference, propagation model of public opinion events based on the sphere effect, and analysis and prediction of the propagation of public opinion events under the effect of complex public opinion field. These studies can achieve accurate prediction of public opinion propagation in complex public opinion field environments.

SPEAKER

Dr. Yajun Yang

Tianjin University, China

BIO

Dr. Yajun Yang is an Associate Professor and doctoral supervisor at the College of Intelligence and Computing, Tianjin University. He received his Ph.D. from the Harbin Institute of Technology and has held visiting scholar positions at The Chinese University of Hong Kong and Griffith University. His research interests focus on graph databases, graph mining, and graph learning. Dr. Yang has served as the principal investigator on multiple research projects funded by the National Natural Science Foundation of China (NSFC) and the National Key Research and Development Program of China. He has published more than 40 papers in leading international conferences and journals, including SIGMOD, VLDB, ICDE, KDD, NeurIPS, TOIS, AAAI, ICDM, CIKM, and DASFAA. He has also served as a program committee member for several international conferences, such as KDD, ICDE, CIKM, DASFAA, APWeb-WAIM, and ADMA.

Thursday, 16 October 2025 14:00-14:50 Room C-LP-06 **Tutorial 4**

Tutorial 4: Recent Advances in Worker Selection: From Social Diffusion to Federated Learning

This report summarizes the recent advances about worker selection across crowdsourcing, social networks, and federated learning. In social diffusion, it introduces MT-DM, a multi-task diffusion incentive mechanism that fuses reverse auctions with Multi-Task RR sampling to maximize expected task quality under budget with truthfulness, individual rationality, and near-optimality, achieving major runtime gains. It then presents DQNSelector, which learns dual embeddings of long-range social influence and local sensing coverage with Rainbow DQN to choose seed workers, boosting effective coverage by 6–18% with sub-second inference. In federated learning, client selection with unknown data quality is modeled as a CMAB with a Stackelberg game, leveraging gradient-discrepancy estimation, CUCB exploration, and incentive design to attain a unique equilibrium, lower regret, and reduce training cost while preserving accuracy. Finally, a training-potential–driven joint client–modality selection framework mitigates multi-modal FL communication by 25–75% with negligible accuracy loss, validated by convergence analysis and extensive experiments.

SPEAKER

Dr. Jianxiong Guo

Beijing Normal University, China

BIO

Jianxiong Guo is an associate professor with the Advanced Institute of Natural Science, Beijing Normal University, and vice director of the Engineering Research Center of Cloud-Edge Intelligent Collaboration on Big Data, Ministry of Education. He received his Ph.D. from the, Department of Computer Science, University of Texas at Dallas, in 2021 supervised by Dr. Ding-Zhu Du. He is mainly engaged in the research of combinatorial optimization, game and incentive mechanism design in social networks, distributed machine learning, Internet of Things, and cloud-edge collaborative systems, recently focusing on build efficient networking systems for AI applications. In recent years, he has published more than 100 academic papers in computer networks, data science, and theoretical computer science, among which more than 40 papers have been published in IEEE/ACM Transactions series as the first/corresponding author. He presided over or participated in several national projects, including NSFC and National Key R&D program of China, and served as a member of academic committees of many top international conferences and a reviewer of international journals.

Panel Discussion: Challenges & Opportunities for Academic & Industrial Education in the New Era of GenAI & Agentic AI

Time: Friday, 17 October 2025 17:10-18:30
Room: E-LP2-01 Sports Hall
Moderator: Dr. Jianquan Liu

Panelists:

- Prof. Chee Kit Looi, The Education University of Hong Kong, China
- Prof. Raian Ali, Hamad Bin Khalifa University, Qatar
- Prof. Masakazu Iwamura, Osaka Metropolitan University, Japan
- Dr. Elpida Tzafestas, University of Athens, Greece
- Dr. Runze Wu, NetEase Inc., China
- Dr. Xin Li, iFLYTEK, China

SPEAKER

Dr. Jianquan Liu

NEC Corporation, Japan

BIO

Jianquan Liu is currently the Director and Head of Video Insights Discovery Research Group at the Visual Intelligence Research Laboratories of NEC Corporation, working on the topics of multimedia data processing. He is also a visiting professor at Nagoya University and an adjunct professor at Hosei University, Japan. Prior to NEC, he was a development engineer in Tencent Inc. from 2005 to 2006, and was a visiting researcher at the Chinese University of Hong Kong in 2010. His research interests include high-dimensional similarity search, multimedia databases, web data mining and information retrieval, cloud storage and computing, and social network analysis. He has published 70+ papers at major international/domestic conferences and journals, received 30+ international/domestic awards, and filed 70+ PCT patents. He also successfully transformed these technological contributions into commercial products in the industry. Currently, he is/was serving as the Industry Co-chair of IEEE ICIP 2023, 2025 and ACM MM 2023, 2024; the General Co-chair of IEEE MIPR 2021; the PC Co-chair of IEEE IRI 2022, ICME 2020, AIVR 2019, BigMM 2019, ISM 2018, ICSC 2018, ISM 2017, ICSC 2017, IRC 2017, and BigMM 2016; the Workshop Co-chair of IEEE AKIE 2018 and ICSC 2016; the Demo Co-chair of IEEE MIPR 2019 and MIPR 2018. He is a senior member of ACM and IEEE, and a member of IEICE, IPSJ, APSIPA and the Database Society of Japan (DBSJ), a member of expert committee for IEICE Mathematical Systems Science and its Applications (2017-), and IEICE Data Engineering (2015-2021), and an associate editor of IEEE TMM (2023-), ACM TOMM (2022-), EURASIP JIVP (2023-), IEEE MultiMedia Magazine (2019-2022), ITE Transaction on Media Technology and Applications (2021-), APSIPA Transactions on Signal and Information Processing (2022-), and the Journal of Information Processing (2017-2021). Dr. Liu received the M.E. and Ph.D. degrees from the University of Tsukuba, Japan.. .

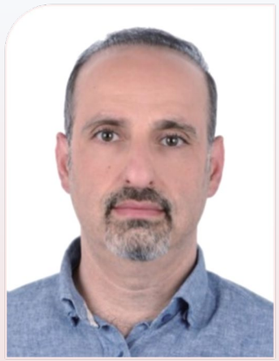
Panelist

Prof. Chee Kit Looi

The Education University of Hong Kong, China

BIO

Prof. Looi obtained his PhD in Artificial Intelligence from the University of Edinburgh, UK. His research focuses on learning sciences, computer-supported collaborative learning, mobile learning, AI in education, and computational thinking. He has had published more than 120 papers in international journal papers, as well as over 50 books or chapters, and produced 160 refereed international conference papers. Professor Looi has given more than 90 keynote speeches, and plenary and invited talks at international conferences and institutions. His research has had a high level of influence on educational practices. His work on rapid collaborative learning was cited in the 2010 US National Educational Technology Plan as a key example of technology-enabled innovation of significant impact. Professor Looi is a Fellow of the International Society of Learning Sciences, and a Fellow of the Asia-Pacific Society for Computers in Education. During his stint at the National Institute of Education, Nanyang Technological University, Singapore, Professor Looi was the founding head of the Learning Sciences Lab, the first research centre devoted to the study of the sciences of learning in the Asia-Pacific region. He served as the President of the Global Chinese Society for Computers in Education from 2017 to 2019.



Panelist

Prof. Raian Ali

Hamad Bin Khalifa University, Qatar

BIO

Raian Ali has been a Professor at Hamad Bin Khalifa University (HBKU) and a UNESCO chair in digital technologies and human behaviour (June 2025–June 2029). He obtained his PhD from the University of Trento, Italy, in 2010, and has previously worked at the University of Limerick in Ireland, and Bournemouth University in the UK. His undergraduate degree is from the University of Latakia (formerly Tishreen University), Syria. His research primarily focuses on technology and human behaviour, encompassing topics such as digital addiction, responsible technology use, and the impact of technology design on human well-being. He is a member of the steering committee for the Society of Persuasive Systems, and of the steering committee of the Behaviour and Social Computing community. He has led projects with academic and industry partners, resulting in significant impact, outreach, policy change, and scientific publications. Notably, he leads the $3.8 million cluster on digital citizenship in Qatar (2022–2027), supervising six projects, collaborating with over 15 national and international partners, and managing a team of 50 personnel. Raian also provides consultancy both nationally and internationally.

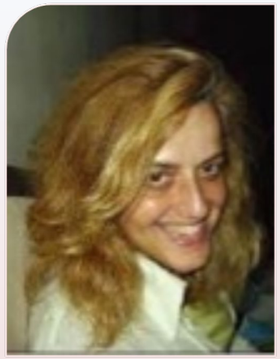
Panelist

Prof. Masakazu Iwamura

Osaka Metropolitan University, Japan

BIO

Masakazu Iwamura (Member, IEEE) received the B.E., M.E., and Ph.D. degrees in engineering from Tohoku University, Japan, in 1998, 2000, and 2003, respectively. He is currently a Professor with the Department of Core Informatics, Graduate School of Informatics, Osaka Metropolitan University. His research interests include text and object recognition and visually impaired assistance. He has received numerous awards, including the IAPR/ICDAR Young Investigator Award, in 2011, the Best Paper Awards of IEICE, in 2008 and 2021, the IAPR/ICDAR Best Paper Award, in 2007, the IAPR Nakano (Best Paper) Award, in 2010, the ICFHR Best Paper Award, in 2010, the MVA Best Paper Award, in 2017, and the SIGACCESS Best Paper Award, in 2023. He served as the Vice-Chair of the IAPR Technical Committee 11 (Reading Systems), from 2016 to 2018, an Associate Editor of International Journal of Document Analysis and Recognition, from 2013 to 2023, and an Associate Editor and an Associate Editor-in-Chief of IEICE Transactions on Information and Systems, from 2017 to 2021 and from 2021 to 2023, respectively.



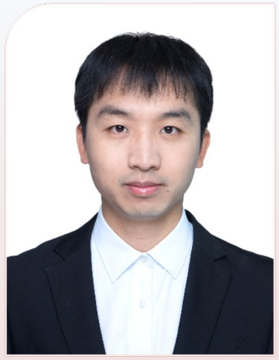
Panelist

Dr. Elpida Tzafestas

University of Athens, Greece

BIO

Dr. Tzafestas obtained Electrical and Computer Engineer from National Technical University of Athens, Greece, and M.Sc. and Ph.D. on Artificial Intelligence from University Paris VI, France. She is an Associate Professor of Artificial Intelligence and the former Director of Laboratory of Cognitive Science (2018-2022). She has taught a number of undergraduate courses on computer science and graduate courses on intelligent, complex and biological systems. In the University of Athens, she teaches undergraduate and graduate courses in artificial intelligence, cognitive science, complex systems and modeling. She has been the principal investigator in numerous national and European R&D projects and has authored over a hundred articles in journals, books and conference proceedings, most of them as a single author. She serves on several editorial boards and is frequent reviewer for journals, conferences and research grants. Her research interests lie on the intersection of complex and cognitive systems and focus on modeling of social, biological and psychological behavior. She is also interested in generative art and sustainable development. Her long-term research objective is to better understand the origins of human intelligence.



Panelist

Dr. Runze Wu

NetEase Inc., China

BIO

Dr. Wu holds a Ph.D. in Computer Science from the University of Science and Technology of China (USTC), where he also completed his bachelor's degree. Dr. Wu furthered his research as a visiting scholar at the University of Technology Sydney and as a postdoctoral fellow at Zhejiang University. Dr. Wu currently leads User Profiling Group of Fuxi AI Lab, NetEase Inc. His interests cover a wide range of domains like user modeling, personalization, behavior analysis, and AI for novel applications. He has published 30+ top-tier AI conference/journal papers like KDD, AAAI, ICDE, CIKM, TKDE, TKDD, TOIS etc., and served as SPC/PC/reviewer for top-tier conferences and journals. His research outcomes have been successfully applied and integrated into many top online games released by NetEase Games.

Panelist

Dr. Xin Li

iFlyTek, China

BIO

Li Xin, Ph.D. and the senior engineer, is the vice president of the AI Research Institute and the head of the R&D department of iFLYTEK. He obtained his Ph.D. degree from and served as postdoctoral researcher and associate professor at the University of Science and Technology of China (USTC), and was a visiting scholar at the University of Technology Sydney (UTS). He is also a researcher at the National Key Laboratory for Cognitive Intelligence, a senior member of China Computer Federation (CCF), the member of the Executive Committee of the CCF's Big Data Committee, the member of council in the China Association of Standardization (CAS), the deputy director of Brain-Computer Interface and Brain-inspired Intelligence Special Committee of CAS, and the vice chairman of the System and Industry Application Group in Brain-Computer Interface Alliance (BCIA). He is also a young expert of the China Internet Society and a founding editor of the Journal of Natural Language Processing, and received “The Young 30” honor of Brain Science and Brain-like Intelligence, KSEM and CIKM best paper/ runners up award. He is mainly responsible for the application research of artificial intelligence and cognitive neuroscience technology in education, medical and other fields. He has led and participated in multiple projects including the 2030 Program and the key research and development programs of the Ministry of Science and Technology of China, along with several funds of Natural Science Foundation of China. He has published over 90 papers and patents in top international academic conferences and well-known journals.

The International Workshop on Artificial Intelligence for Law (WAIL 2025)

Time: Thursday,16 October 2025 09:00-10:30
Room: C-LP-04
Chair: Prof. Juan Xu

#13. The Legal Regulation of Artificial Intelligence (AI) in International Arbitration (IA): A Contractual and Judicial Perspective.
Boli Yang

#19. Legal Characterization of Reverse Engineering in Large-Scale AI Models: A Jurisprudential Analysis.
Yiming Bao, Meixin Du, Xiaowei Zhong

#25. Deconstructing Compliance and Exploring Regulatory Pathways for Artificial Intelligence Data Security: A Case Study of Biosimilar Drug Development.
Yichu Meng

#26. Collegial Panel Mechanism Legal Judgement Prediction Via Majority Voting and Rationale Generation.
Chaoyu Wei, Tenan Wu, Juan Xu, Kun Zeng, Tianyong Hao

#27. Binary Evaluation Model for Legal Artificial Intelligence: Enhancing the Interpretability of Legal Judgment Predictions.
Quanquan Zhang

#28. Balancing Data Sharing and Security in the Era of AI: A Risk Governance Framework for China's Smart Courts.
Xi Li, Yingyu Ren

Intelligent Models for Language and Cross-Cultural Education (IMLCCE)

Time: Thursday,16 October 2025 11:00-12:00
Room: C-LP-04
Chair: Prof. Yuanyuan Mu

#1. Modeling Sentiment Analysis for Educational Texts by Combining RoBERTa, CNN and BiLSTM.
Chenhao Ke

#3. From Translator to Insider: Rethinking the Limits of Translation Competence in MTPE of a Football Text.
Zichen Wang

#4. Evaluating Subtitle Translations of Genshin Impact: A Comparative Analysis of AI and MT Systems.
Zhuqi Jin, Yutong Cao, Yingyi Zhuang

#5. Empowering Science Learning with AI-Driven Science Agents: A Talk-on-Science Model for Interdisciplinary Innovation and Scientific Literacy.
Haiqin Sun, Zhiyuan Gu

The International Symposium on Machine Learning and Social Computing (MLSC 2025)

Time: Thursday,16 October 2025 14:00-16:30
Room: C-LP-04
Chair: Prof. Jinhua Tan

#1. A Study on the Influencing Factors of AIGC-Generated News Content Adoption Based on Audience Perception.
Huining Cao

#2. Supervised Contrastive Learning for Few-Shot EEG-Based Person Identification.
Xinghan Shao

#3. Accurate Traffic Flow Prediction Using a Hybrid Deep Learning Model.
Zhaihou Wei

#4. Optimal Intelligent Car-Following Model Based on GCN and GRU.
Chang Liu

#5. Federated Spatio-Temporal Graph Convolutional Network for Traffic Flow Prediction.
Yuxi Sun

#6. Deep Reinforcement Learning for Truck Following Decision-Making in Autonomous Driving.
Shuanglin Wang

#7. A Car-Following Model Integrating Neighboring Velocity Field and Random Forest.
Jieyang Lin

#8. Impact of Driver's Perceptual Quirk of Velocity on Traffic Dynamics and Safety in Fog Weather.
Miaoqi Yang

#9. An Interpretable Machine Learning Method for Rockburst Risk Assessment.
Siyang Chen

#10. Mechanical Manufacturing Process Intelligence Based on Artificial Intelligence Algorithm.
Yundong Zhao

Doctoral Consortium

Time: Thursday,16 October 2025 14:00-15:20
Room: C-LP-18
Chair: Prof. Lin Li & Dr. Elena Vlahu-Gjorgievska

#117. A Preliminary Examination of an LLM-based Computational Framework for Analyzing Public Discourse in Policy-Making.
Kohei Ishii

#143. A Multi-Agent System for Multi-Modal Educational Content: A Case Study.
Jingjun Wei

#141. Effective and Efficient Role-Playing LLM Agent via Pruning Knowledge.
Yaohong Ding

#126. Research Proposal on Enhancing Authenticity in Online Communication: A Digital Nudge Approach.
Asma Elfadl

#127. The Dual Role of Peer Pressure on Social Media in Addiction and Well-being.
Amal Ali

#111. Investigating LLMs Dependency vs Privacy-Risk Tolerance: a Research Proposal.
Zineb Hamdi

Technical Session 1: AI for Social Good

Time: Friday,17 October 2025 10:40-12:00
Room: E-LP2-20
Chair: Dr. Zhiyuan Wen

#97. Using Topic Detection to Analyze Student Reffections in Service-Learning: A Text Mining Method for Understanding Learning Gains.
Yuanyuan Wang, Grace Ngai, Hong Va Leong, Chi Fai Stephen Chan, Eugene Yujun Fu

#119. MyEcoPal: Bridging the Gap between Sustainability Understanding and Sustainable Actions.
Qiming Sun, I-Han Hsiao

#50. Quantifying Off-the-ball Attacking Contribution in Football: A GCN-LSTM Approach Supervised by Expert Assessments.
Daiki Yoshikawa, Tomonobu Ozaki

#124. Temporal Inference of Psychosocial States from Digital Biomarkers for Just-In-Time Adaptive Interventions.
Shah Aishah, Vladimir Tomberg

#96. Framework for Diverse Depression Patients Roleplaying and Cognitive Diagnosis of Scales Using LLMs Based on CoT Prompts.
Shixin Peng, Kun Jiang, Yu Yang, Jingying Chen, Guandong Xu

#120. Uncovering the Nexus Between Attitudes Toward LLMs and Problematic Dependency on Them: A Latent Profile Analysis.
Rahman Mohammad, Raian Ali, Ala Yankouskaya

#125. Exploring Global Patterns of Social Media Disorder: The Role of Sociodemographic Factors.
Syeda Rizvi, Ala Yankouskaya, Sameha Alshakhsi, Mamunur Rashid, Raian Ali

#132. Research and Application of AI Decision System for Perioperative Period Based on Smart IoT and WIRE Database.
Xiang Wang, Haihua Shu, Siliang Li, Hao Wang

Technical Session 2: Social Media Analysis

Time: Friday,17 October 2025 11:00-12:00
Room: E-LP2-21
Chair: Dr. Kaixi Hu

#18. Early Detection of Multimodal Hot-Topic Misinformation in User-Generated Content.
Zheng He, Jiawei Li, Zhonghong Ou, Meina Song, Qika Lin, Kaize Shi,Yifan Zhu

#93. Predicting Career Trajectories After Career Breaks: A Data-Driven Analysis Using LinkedIn Profiles.
Kamila Kargabaeva, Yu Yang, Luka Anicin, Milos Stojmenovic, GuanDong Xu

#118. Beyond Words: Latent Profiles of Online Communication Styles and their Association with Social Well-Being on Social Media.
Asma Elfadl, Sameha AlShakhsi, Nan Jiang, Raian Ali, Ala Yankouskaya

#88. Developing a Novel Tag Cloud System for Optimized Visualization and Behavioral Analytics in Cosmetic Review Platforms.
Shizuku Kitamura, Asaka Lan Cheng, Fumiya Yamaguchi, Mayumi Ueda, Nakajima Shinsuke

#7. Early Detection of Fake News Based on Sequential Analysis of Social Context and Adaptive Thresholding.
Jianwei Zhang, Soma Tani, Lin Li

#14. A Multidimensional Sentiment Analysis Model for Experience Assessment.
Wanwan Zheng, Yang Li, Koji Makino, Katsuhisa Yoshikawa, Hara Kunihiko, Shibata Hiroshi, Ohira Hideki

#68. Echoes or Adversaries? Asymmetric Polarization in Elite Digital Communication.
Mengjie Wang

#77. Interpretable and Transparent Experimentation on Policy Ideas in a Social Simulation Environment.
Nikitas Sgouros

Technical Session 3: Recommendation (Part 1)

Time: Friday,17 October 2025 14:50-15:50
Room: E-LP2-20
Chair: Dr. Dan Lu

#101. Continuous Sub-sequence Denoising For Sequential Recommendation.
Siying Wang, Rui Chen, Dan Lu, Chi Zhang, Yantong Du, Qilong Han

#86. An Examination of Methods for Resolving Reviewer Dissatisfaction in Hotel Recommendation Systems.
Yujiro Hayashi,Jianwei Zhang, Yukiko Kawai, Shinsuke Nakajima

#103. ReCareer: Hybrid Graph Neural Networks for Post-Career-Break Job Recommendation.
Yunqi Wang, Yu Yang, Longxiang Gao, Xiaoming Wu, Guandong Xu

#148. DCKG: A Dual-view Collaborative Knowledge Graph for Pull Request Recommendation.
Lijie Li, Dongxu Li, Xiaodi Xu, Ye Wang, Qilong Han

#67. DCSN: Dynamic Calibration and Contrastive Sharpening for MultiModal Recommendation.
Jicheng Sun, Shuai Xu, Yicong Li

#99. Modeling Rater Severity Drift in Single-Rater Performance Assessments Using Bayesian Hierarchical Methods.
Yokouchi Yuichiro, Kuangzhe Xu, Takaki Shuichi, Mitsunaga Haruhiko

Technical Session 4: Interdisciplinary Study (Part 1)

Time: Friday,17 October 2025 14:50-15:50
Room: E-LP2-21
Chair: Yuhan Zou

#134. Cultural Pathways of Life Value Realization: Insights from Chinese and American Obituaries.
Xinyi Tong, Wenqing Zhang, Kaiping Peng, Yingnan Cong, Song Tong

#153. Regional Dynamics of Public Opinion in Post-Pandemic China: A Weibo Data Analysis.
Qi Peng, Xingyu Liu, Xiwen Wang, Ting Xue

#136. Person-Environment Fit: How the Gini Coefficient Moderates the Relationship between Personality and Well-being.
Liuling Mo, Hao Chen, Kaisheng Lai

#158. Pathways for Cultural Evolution of War Behaviours.
Elpida Tzafestas

#147. How Do LLMs Generate Emotional Metaphors? A Vector-Based Cognitive Investigation.
Anna Mao, Wenqing Zhang, Kai Mao, Kaiping Peng, Honghong Bai, Song Tong

#128. Generalized Threats Predict Trust Dynamics Over Time.
Yan Mu

Technical Session 5: Artificial Intelligence

Time: Friday,17 October 2025 16:10-17:10
Room: E-LP2-20
Chair: Dr. Yifan Zhu

#40. NLCC: Noisy Label Correction with CLIP for Robust Few-Shot Learning.
Bowen Han, Shizhuo Deng, Jiaqi Chen, Zehua Gan, Dongyue Chen, Yue Zhu

#11. Accelerating High-Dimensional Expensive Multi-Objective Optimization via Surrogate-Assisted Fuzzy Directed Sampling.
Zihua Guo, Minrong Chen, Jixiang Zeng, Zeyang Zhang, Songxiang Zhong

#12. An Improved Large-Scale Multi-Objective Competitive Swarm Optimizer Based on Harris Hawks Optimization.
Jixiang Zeng, Minrong Chen, Zihua Guo, Zeyan Zhang, Songxiang Zhong

#13. Multimodal Multiobjective Optimization Algorithm based on Two-stage Proportional Selection.
Zeyan Zhang, Minrong Chen, Jixiang Zeng, Zihua Guo, Songxiang Zhong

#17. Discrete-Time Sigma-Delta Modulator Coefficient Optimization via Soft Actor-Critic Reinforcement Learning.
Wanli Zhao, Junpeng Zhang, Zhenyu Rao, Chen Yang, Minglei Tong, Yongqing Sun

#25. GADM: Granularity-Aware Diffusion Model for Uncertainty Forecasting in Non-Stationary Time Series.
Zhuhua Wang, Rui Chen, Hongtao Song, Qilong Han

#39. Bridging Dependency Enhanced Counterfactual Supporting for Multi-hop Question Generation.
Kaixin Hu, Lin Li, Haohan Zhang, Jianwei Zhang, Xiaohui Tao

Technical Session 6: Interdisciplinary Study (Part 2)

Time: Friday,17 October 2025 16:10-17:10
Room: E-LP2-21
Chair: Dr. Yan Mu

#51. ROLLY: A Software-Controlled Multi-Sensor Social Robot for Interventions toward Children with Autism Spectrum Disorder.
Safa Ali, Ejmen Al-Ubejdij, Farida Mohsen, Ali Al-Zawqari,Omar AlAgha, Raian Ali

#133. The Truth-Sharing Gap: Experimental Evidence from the Chinese Social Media Context.
Wenqing Zhang, Xinyi Tong, Kaiping Peng, Yingnan Cong, Song Tong

#44. Research on the Perspective Transformation and User Experience of Chinese Interpretive Film Short Videos Driven by Artificial Intelligence.
Sijie Li, Yingjie Wang

#130. The Impact of Thinking Levels and the Virtual Nature of Online Videos on Individuals' Judgment of Truth and Falsity.
Yu Huang, Yuhua Wang, Xinru Wu, Dimeng Wu, Ting Xue

#78. From Words to Deeds: Predicting the Spatial Distribution of Collective Action in China Through Social Media Textual Expression.
Yuhan Zou, Hao Chen, Tingshao Zhu

#155. Using Large Language Models to Forecast the 2024 U.S. Presidential Election: Accuracy, Bias, and Media Influence Across Partisan Contexts.
Lin Qiu, Mengjia Wang

Demo Session

Time: Friday,17 October 2025 15:50-17:10
Room: Outside Sports Hall
Chair: Dr. Xin Li

#22. Exploring Exercises Selection Methods for Computerized Adaptive Testing Based on Large Language Models.
Tianle Li, Hai Wang, Haiping Ma

#27. A Large Language Model System for The Field of Chemical Engineering Technology.
Heng Zhang, Mao Ye, Hao Wang, Xi Li

#29. An automated extraction system for material chemistry experimental protocols.
Fan Yang, HuaDong Liang, XiangHui Fan, FeiYang Xu, Linjiang Chen, Xin Li, Le Wu, Kun Zhang

#32. AI as Game Designer: Achieving Optimal Level Balance through LLM-based System.
Yiwei Huang, Shiwei Zhao, Runze Wu, Jiale Wei, Zhipeng Hu, Ping Wang, Tianjie Lv, Le Li, Changjie Fan

#33. Adaptive Cooperative Perception Task Scheduling for Vehicle Platoons via PPO-Based Deep Reinforcement Learning.
Fenghui Zhang, Jiaxin Ma, Ao Zhou, Yu Zong, Qiu Xu, Huaqiang Xi

#34. A Multimodal Cognitive Assessment System with Task-Level Scoring and Risk Labeling.
Qinyuan Chang, Shuyu Lu, Feiyang Xu, Mingming Hu, Huadong Liang, Yi Li, Xin Li

#36. SiMiao: A Multi-Agent Collaborative Research Assistant for Scientific Knowledge Discovery in the Field of Chemistry.
Yunlong Xu, Fan Yang, Huadong Liang, Feiyang Xu, Jian Cui, Yi Li, Jianyu Han, Xin Li, Hao Wang

#38. Adaptive Load Balancing in Industrial Edge Computing: A Multi-Agent Reinforcement Learning Approach.
Fenghui Zhang, Hao Xu, Yu Zong, Qiu Xu,Yousef Algoos, Zhiqiang Chang

#45. An Intelligent Supervision Platform for School Canteens: Safeguarding Student Food Quality.
Zhe Li, Xiao Jing, Zhiang Wu

#75. TechNexus: An LLM-Powered Platform with Spatio-temporal KGs for University-Industry Technology Transfer.
Jun Feng, Xuezhi Yang, Xin Jing, Shuai Fang

#85. GenAI-empowered Virtual Micro-teaching Training System for Preservice Teachers.
Bojie Liu, Yu Yang, Guandong Xu

#98. SHAP-RM: Interpretable Reward Model Evaluation for Text Generation Quality Assessment in Role-Playing Dialogue Systems.
Zimo Jin, Yu Xiong, Runnze Wu, Tangjie Lv, Changjie Fan, Zhipeng Hu

#102. FollowUpBot: An LLM-Based Conversational Robot for Automatic Postoperative Follow-up.
Chen Chen,Jianing Yin, Jiannong Cao, Zhiyuan Wen, Mingjin Zhang, Weixun Gao, Xiang Wang, Haihu Shu

#116. CodeEdu: A Multi-Agent Collaborative Platform for Personalized Coding Education.
Jianing Zhao, Peng Gao, Jiannong Cao, Zhiyuan Wen, Chen Chen, Jianing Yin, Ruosong Yang, Bo Yuan

Technical Session 7: Behavior & Mobility Modeling

Time: Saturday,18 October 2025 09:50-10:40
Room: E-LP2-20
Chair: Dr. Kaize Shi

#121. The Effectiveness of Balanced Product Explanations for Decision Support in Online Shopping.
Elaheh Jafari, Julita Vassileva

#122. How Warnings of Product Drawbacks Affect Online Shopping Decisions.
Elaheh Jafari, Julita Vassileva

#52. Optimizing Urban Commercial Landscapes with POI Strategic Group Analysis: A Meta-Learning Hypergraph Approach.
Jiaqi Jiang, Xin Lin, Jiahui Jin, Siyuan Huang, Haoyu Chen, Xigang Sun

#28. DFST-Net:Dual-Frequency Spatiotemporal Graph Neural Network for Traffic Forecasting.
Nan Wang, Huishan Han, Qilong Han

#107. Two-lane local optimality driving strategy for enhancing traffic stability.
Xuqian Qin, Zhengyuan Du, Shuanglin Wang, Jieyang Lin, Yuxi Sun, Jinhua Tan

Technical Session 8: AI for Healthcare (Part 1)

Time: Saturday,18 October 2025 10:20-10:40
Room: E-LP2-21
Chair: Dr. Jianquan Liu

#89. Real-Time Multimodal Hazard Detection for Assistive Wheelchair Navigation.
Xinxiao Li, Eisei Nakahara

#23. Comparative Study on Medication Adherence Between Traditional Chinese Medicine and Western Medicine Under Conflicting Information: A Case Study of Chronic Diseases.
Lingnan He, Yongqi Jia, Maohan Lin

Technical Session 9: Recommendation (Part 2)

Time: Saturday,18 October 2025 11:00-12:00
Room: E-LP2-20
Chair: Dr. Nengjun Zhu

#31. Prompt-based Zero-shot Learning in Large Language Models for Recommender Systems: A Reproducibility Study.
Yiran An, Lin Li, Kaixi Hu, Xiaohui Tao, Jianwei Zhang

#54. MacCDR: a Memory-Augmented Cluster-Level Preference Mapping Framework for Cross-Domain Cold-Start Recommendation.
Yixin Chen, Tianzi Zang, Juan Li

#104. PFRCRP: Parameter-Factorized Personalized Federated Recommendation for Cross-Domain Rating Predictions.
Renchao Su, Juan Li

#115. Enhancing the Training Process with Multi Metrics for Session-based Recommendations.
Xiaoxi Liu, Zikai Zhang, Yuanzhouhan Cao, Yidong Li

#129. Interpretable Recommendation via Semantic and Syntactic Knowledge Enhanced Aspect-based Sentiment Analysis.
Yiming Wu, Tangwei Ye, Liang Hu, Qi Zhang, Mana Zhang, Mingzhu Zhou,Siyi Ma

#139. Large-scale Weakly Supervised Person Re-ID: Towards Generalizable and Scalable Solutions.
Weiquan Huang, Yan Bai, Ming Feng, Mana Zheng, Liang Hu

Technical Session 10: AI for Healthcare (Part 2)

Time: Saturday,18 October 2025 11:00-12:00
Room: E-LP2-21
Chair: Dr. Junceng Ye

#151. Dual-Level Contrastive Learning for Patient Condition Representation with Multimodal Electronic Health Records.
Yan Gong, Bohao Li, Junchen Ye, Bowen Du, Liyan Xu

#110. Machine Learning-Ready Genomic Biomarkers: ATF3 Polymorphisms Predict Postoperative Analgesic Demand Through AI-Compatible Phenotyping.
ShiLian Zhou, Fang Ye, Haihua Shu, Xiang Wang

#144. Ensemble Transformer-Based Multiple Instance Learning for Predicting Neoadjuvant Chemotherapy Response from Breast Cancer Biopsy Whole-Slide Images.
Kaining Ye, Xuehong Liao, Kaixin Du

#43. Analysis of Tongue Image Data Augmentation and Classification Methods Based on Multi-Attribute Features.
Entao Chen, Runhe Huang, Chunyu Tu, Zhiyong Yu, Kaixin Du

#81. Discovering Brain Functional Connectivity in Parkinson's Disease from Graph Mining Perspectives.
Yan Cong, Xiang Wang, Xin Wang, Yichen Lv, Yu Yang, Haoli Wang

#46. Non-invasive Evaluation of Fatigue State of Non-manual Workers Based on CNN-LSTM Network.
Zhan Ma

Technical Session 11: Anomaly Analysis

Time: Saturday,18 October 2025 14:50-15:30
Room: E-LP2-20
Chair: Dr. Shizhuo Deng

#24. Anomaly Detection Method for Tabular Data Based on a Three-Phase Learning Paradigm.
Yufei Li, Hongtao Song, Qilong Han

#92. Density Harmonized Gradient Descent Online Active Learning for Imbalanced Data Streams.
Jianhao Huang, Zhihong Zeng, Zhangkai Wu, Hengyu Liu, Yanfang Liu

#152. Text-Enhanced Panoptic Symbol Spotting in CAD Drawings.
Xianlin Liu, Yan Gong, Bohao Li, Jiajing Huang, Bowen Du, Junchen Ye, Liyan Xu

#79. Do You Tolerate System Failures? Investigating System Failure Tolerance Methods via Prior Statements.
Masahide Yuasa

Technical Session 12: AI for Education (Part 1)

Time: Saturday,18 October 2025 14:50-15:30
Room: E-LP2-21
Chair: Dr. Shiqing Wu

#83. Classroom-Free Educational Experimentation: A Stochastic Learning-Design Simulation Framework with LLM Optimization.
Da Gong

#35. AgentLesson: LLM-Based Multi-Agent System for Educational Lesson Plan Generation.
Yakun Chen, Yu Yang, Guandong Xu

#109. Multimodal Learning Analytics for Predicting Learning Gain in Online Service-Learning Programs.
Kangzhong Wang, Eugene Yujun Fu, Grace Ngai, Hong Va Leong

#72. Student Learning Engagement Recognition Method Based on Video Transformer.
Wenhao Liao, Yuanyuan Wang, Xinwei Zhai, Sineng Yan, Kai Zhong, Eugene Yujun Fu

Technical Session 13: AI for Molecular Modeling and Drug

Time: Saturday,18 October 2025 15:50-16:30
Room: E-LP2-20
Chair: Prof. Lin Li

#140. Optimized Feature Extraction and Alignment for Cross-Modal Molecule Retrieval.
Linjing Qian, Meng Li, Ningkang Peng, Taotao Long

#150. MolJury: A Role-Driven Multi-Agent Architecture for Factual Molecular Understanding.
Yuhao Zhang, Xiaoyang Li, Ningkang Peng, Yafei Liu, Xinyu Lu, Meng Li, Yeyang Zhou, Peirong Ma

#156. EquiMapLE: High-Fidelity and High-Throughput Molecular Analogue Screening with Equivariant Fingerprints and Learned Fusion.
Xinyu Lu, Lingge Gao, Yuhao Zhang, Yanhui Gu, Weiguang Qu, Peirong Ma, Yafei Li, He Huang

#157. KGsteeredDTI: Drug-Target Interaction Prediction via Knowledge Graphs-Steering.
Xiaoyang Li, Yuhao Zhang, Yafei Liu, Peirong Ma

Technical Session 14: Knowledge Engineering

Time: Saturday,18 October 2025 16:30-17:00
Room: E-LP2-20
Chair: Dr. Yakun Chen

#90. Leveraging Comment Data for Enhanced Content Discovery through Time Series Analysis of Impressive Scenes in Videos.
Akito Sasahara,Lan Cheng, Da Li, Fumiya Yamaguchi, Mayumi Ueda, Nakajima Shinsuke

#26. SpiderGNN: Spatial-Aware Predictive Inference with Dynamic Edge Reasoning for In-Building 5G Signal Estimation.
Xingyi Gao, David Hason Rudd, Ziang Li, Yuming Guo, Huan Huo, Guandong Xu

#30. Contrastive Representation Learning of Floor Plan Images using Human Annotated Attributed Graphs.
Uda Ibuki, Tomonobu Ozaki

Technical Session 15: AI for Education (Part 2)

Time: Saturday,18 October 2025 15:50-17:00
Room: E-LP2-21
Chair: Dr. Daner Sun

#106. ExamEaseVR: An Immersive Virtual Reality Exposure System for Alleviating Test Anxiety.
Haowen Wei, Ding Ding, Xiaoming Yin, Zhantao Gu, Jiahui Jin

#159. An Exploration of ChatGPT in Personalized Learning: Behavioral Flow Analysis of Graduate Student Interactions.
Fenglin Jia, Looi Chee Kit

#161. Designing an Interactive AI-Supported Learning System for Mathematics Education in Primary Schools.
Jingxi Liu, Daner Sun, Zhiwen Xu

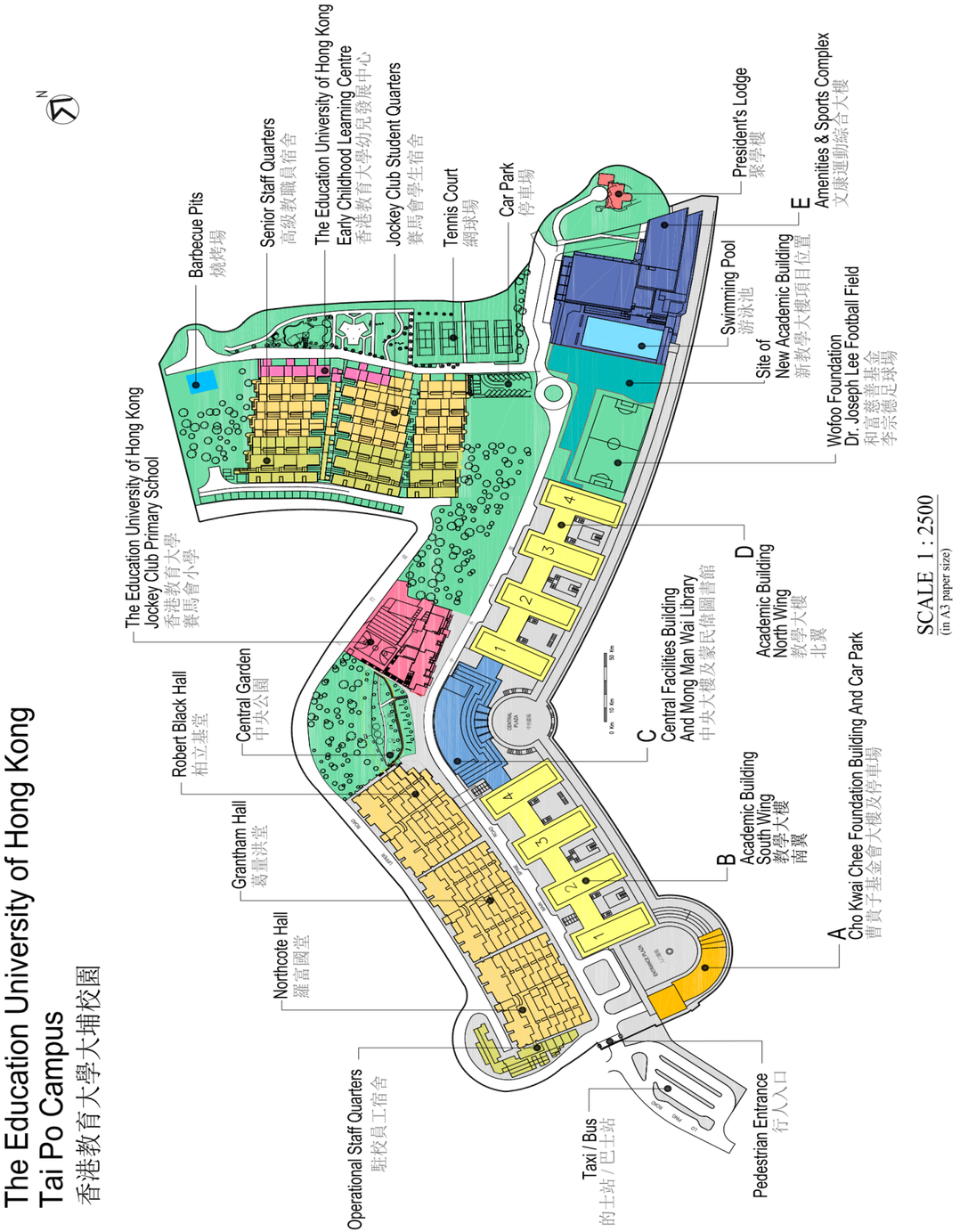
#160. Design and Implementation of an AI Agent-Based Collaborative Platform for Software Engineering Education.
Rui Zhang, Panjincheng Deng, Shengqiong Yuan

#163. Theory-Informed vs. Example-Driven Prompting for LLM-Based Qualitative Data Coding in Educational Research.
Guang Chen, Wangda Zhu, Yin Nicole Yang, Daner Sun, Zhiyuan Wen

#105. A Systematic Review of International Studies on AI-supported Teacher Professional Development.
Huiying Cai, Jiayue Sun, Bing Han

The Education University of Hong Kong Tai Po Campus Map

The Education University of Hong Kong
Tai Po Campus
香港教育大學大埔校園



Transportation

Conference Venue:

The Education University of Hong Kong (EdUHK) Tai Po Campus
Address: 10 Lo Ping Rd, Ting Kok, Hong Kong

Shuttle Bus

Date: Thursday, 16 October 2025

Departure Time: 08:10 AM Hyatt Regency Hong Kong, Sha Tin → EdUHK
Departure Time: 18:10 PM EdUHK→ Hong Kong Science Park

Date: Friday, 17 October 2025

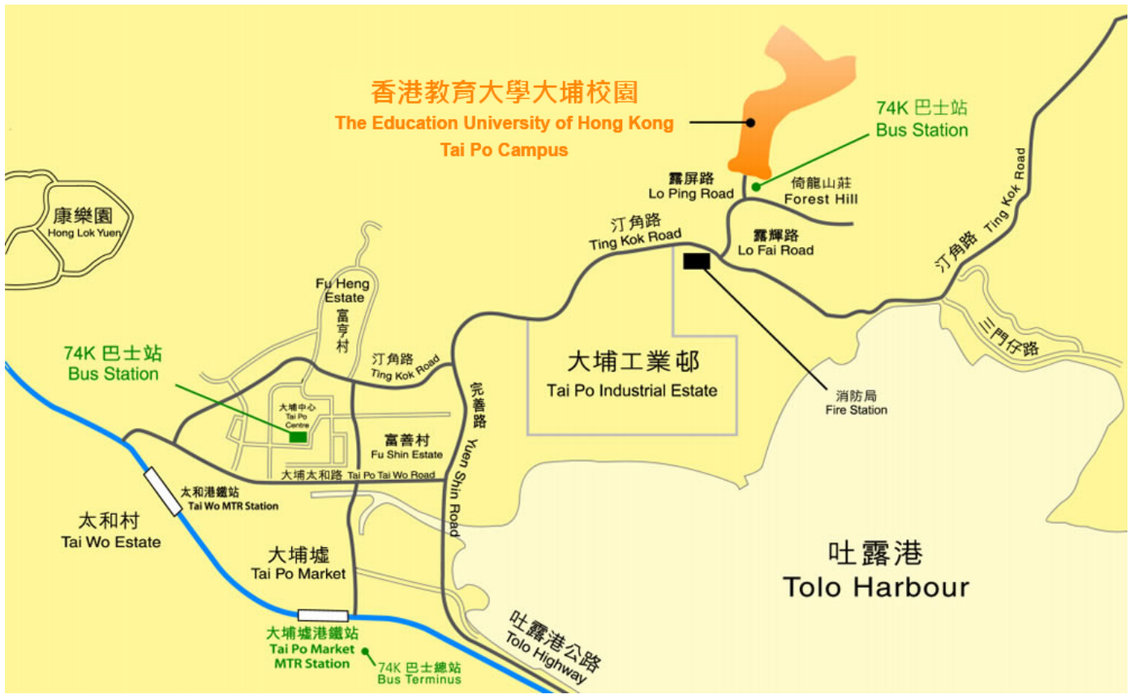
Departure Time: 08:10 AM Hyatt Regency Hong Kong, Sha Tin → EdUHK
Departure Time: 18:45 PM EdUHK → Hung Kee Seafood Restaurant, Sai Kung
Departure Time: 21:30 PM Hung Kee Seafood Restaurant, Sai Kung → Hyatt Regency Hong Kong, Sha Tin

Date: Saturday, 18 October 2025

Departure Time: 08:10 AM Hyatt Regency Hong Kong, Sha Tin → EdUHK
Departure Time: 17:30 PM EdUHK→ Hyatt Regency Hong Kong, Sha Tin

Public Transportation to EdUHK Tai Po Campus

Take MTR train to Tai Po Market Station, then change to bus 74K or taxi to EdUHK



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