ICCSTE2025

June 27th-29th, 2025

Technical Sponsored By

IEEE
Advancing Technology for Humanity

2025 IEEE International Conference on Computer Science, Technology and Engineering [ICCSTE2025]

Wuhan, Hubei, China
June 27th-29th, 2025
http://www.cse2025.com/

IEEE Conference ID: #65902
IEEE Catalog number: CFP250O4-ART
ISBN: 979-8-3315-9827-3

CONTACT US

Email Address: ICCSTE2025@vip.163.com
Wechat / Phone: 13061927147/15337203470 (Chinese Service)
WhatsApp (English Service)

SCHEDULE OF THE CONFERENCE

The Conference Schedule: Chinese Time Zone (GMT+8, Beijing Time)
The time: https://time.is/Beijing
Time Zone Converter: https://www.timeanddate.com/worldclock/converter.html

June 27th 2025, 09:00-18:00: Check in/Test the Meeting App
June 28th, 2025, 09:00-13:00: Keynote Speech
June 28th, 2025, 14:00-20:00: Oral Presentation & Poster Presentation

The conference will be held in a **hybrid format** due to the conference dates conflicting with university graduation periods.
In-Person: All presentations and activities will be held at JUNYI Dynasty Hotel, 87 Luoyu Road, Hongshan District, Wuhan, China
Keynote Speech and Oral Presentation: 09:00-20:00, Moon Lake Hall on the 6F
Poster Presentation: 14:00-20:00, Green Island Hall on the 6F

Online: The conference will be hosted on the Tencent Meeting platform.
Keynote Speech and Oral Presentation: 09:00-20:00:
The Conference Link: https://meeting.tencent.com/dm/NtyGasZvu1Xt
Tencent Meeting ID: 861-177-559
Password: 0628

Poster Presentation: 14:00-20:00
The Conference Link: https://meeting.tencent.com/dm/X2X6GqwDpAPD
Tencent Meeting ID: 344-538-814
Password: 0628

Tencent Meeting App Download Link (Mainland China Participants**):**
https://meeting.tencent.com/download/index.html

VooV Meeting App Download Link (Participants from outside Mainland China**):**
https://voovmeeting.com/download-center.html

June 28th, 2025 Conference Schedule

09:00-09:10	Open Ceremony
09:10-10:00	Keynote Speech I: Prof. Simon K.S. Cheung
10:00-10:50	Keynote Speech II: Prof. M.A. Jabbar
10:50-11:40	Keynote Speech III: Prof. Anand Nayyar
11:40-12:30	Keynote Speech IV: Prof. Pascal Lorenz
12:30-13:00	Invited Speech: Prof. Wen-Cheng Lai
13:00-14:00	Lunch Time, 5F
14:00-19:00	Oral Presentation & Poster Presentation
19:00-20:00	Dinner Time, 5F

Session #1Keynote Speech

09:10-12:30, June 28, 2025

(50 Mins for Keynote Speech, Including 5-10 Mins for Answers)

Session #1	Time	Speech Title	Keynote Speaker
Keynote Speech I	09:10-10:00	Error-free Integration of Distributed System Components based on Augmented Marked Graphs	Prof. Simon K.S. Cheung
Keynote Speech II	10:00-10:50	Demystifying applications of generative AI in health care applications	Prof. M.A. Jabbar
Keynote Speech III	10:50-11:40	Quantum Communication: Trends and Outlook	Prof. Anand Nayyar
Keynote Speech IV	11:40-12:30	Architectures of Next Generation Wireless Networks	Prof. Pascal Lorenz
Invited Speech	12:30-13:00	Silicon Photonics on EA-Oscillator with ADC Controlled Design for Sensing Vibration	Prof. Wen-Cheng Lai

Keynote Speakers

Keynote Speaker I

Beijing Time (UTC+8), Saturday, June 28, 09:10-10:00

Name: Prof. Dr. Simon K.S. Cheung, Chief Information Officer, Hong Kong Metropolitan University, Hong Kong, China
Speech Title: Error-free Integration of Distributed System Components based on Augmented Marked Graphs

Abstract. A subclass of Petri nets, augmented marked graphs possess a structure that is especially desirable for the modelling and analysis of component-based distributed systems involving shared resources. Augmented marked graphs possess a number of desirable properties pertaining to liveness, boundedness, reversibility and conservativeness, that can be preserved undersome simple conditions after composition. These can be effectively applied toan error-free integration of distributed system components which share some common resources. This keynote presentation has two parts. Part 1introduces augmented marked graphs, their properties, and property-preserving components. Part 2 describes the effective application to component-based distributed systems involving shared resources, especially in ensuring that the system integration is free from erroneous situations such as deadlock and capacity overflow. The Dining Philosopher problem is used for illustration.
Keywords: Petri nets; augmented marked graphs; component based software engineering; distributed systems; shared resource systems; system integration.

Biography: Dr. Simon K.S. Cheung obtained his BSc and PhD, both in Computer Science, from the City University of Hong Kong, and his Master of Public Administration with Distinction from the University of Hong Kong. He also received executive education from Oxford's Saïd Business School and Harvard's Kennedy School of Government. A Chartered Engineer as well as a Chartered Scientist by profession, he was admitted as a Chartered IT Professional Fellow of the British Computer Society, Fellow of the Institute of Mathematics and its Applications, Fellow of the Institution of Engineering and Technology, Fellow of the Hong Kong Institution of Engineers, and Fellow of the Hong Kong Computer Society.

Dr. Cheung is currently the Chief Information Officer of the Hong Kong Metropolitan University, overseeing the university IT services for teaching, learning, research and administration. He has been working in the higher education sector (with the Hong Kong Metropolitan University, the University of Hong Kong, the Hong Kong Baptist University, and the Chinese University of Hong Kong) for over 30 years in various administrative capacities, mainly in IT and educational technology, while also undertaking academic duties such as teaching, research, course development and programme accreditation. He has successfully implemented key projects pertaining to enterprise systems, process reengineering, campus infrastructure development, electronic library, blended learning, learning analytics and academic advising. He played a pivotal role in leading digital transformation for the Hong Kong Metropolitan University, deploying blended learning for SPACE, the University of Hong Kong, and implementing the Open Textbooks for Hong Kong project which found the first-ever open access textbook platform in Hong Kong.

Dr. Cheung is also active in research, with 200 publications in two distinct areas, namely, innovation and technology in education, and software and systems engineering. He has delivered 20 keynote and invited speeches for international conferences. Among other consultancy roles, he serves in the advisory board and editorial board for international journals, including the International Journal of Educational Technology in Higher Education (Springer), Australasian Journal of Educational Technology (ASCILITE), SN Computer Science (Springer) and Societal Impacts (Elsevier). Awards in recognition of his achievements include the Outstanding Research Publication Award from the Hong Kong Metropolitan University, Outstanding CIO Award from the Hong Kong IT Joint Council, and Honour for Excellence, CIO Award from the CIO Asia.

Keynote Speaker II

Time Converter: https://www.timeanddate.com/worldclock/meeting.html
Beijing Time (UTC+8), Saturday, June 28, 10:00-10:50
India Time (UTC+5:30), Saturday, June 28, 07:30-08:20

Name: Prof. Dr. M.A. Jabbar, Dept of AI & ML, Vardhman College of Engineering, Vardhaman College of Engineering, Hyderabad, Telangana, India
Speech Title: Demystifying applications of generative AI in health care applications

Abstract: GenAI has been extended into various real-world domains because of its adaptability. AI was introduced to IT industries, businesses, finance, automobile industries, and medical fields to simplify task complexity. Medical imaging is one of the applications in the healthcare sector. Medical data is growing on a daily basis. Consequently, to achieve precise results, advanced computing performance is required. Image synthesis, image segmentation, image classification, prediction, image enhancement, and extraction of important features can all be done very efficiently, quickly, and accurately through GENAI. GenAI facilitates improved resource use and reconstruction, generating new prospects for enhancing datasets used in training and research. In image synthesis, GANs such as styleGAN are employed to create synthetic data to support fields that lack sufficient data. ex. Prediction, detection, and classification of brain diseases such as tumours and Alzheimer's. One can also transform radiology results into one another using cycleGANs through GENAI. Other types of encoders, such as variational autoencoders, also fulfil this function. Thus, this diminishes the reliance on radiology devices beneficial for people and the environment alike and conserves resources or lessens their consumption.
Keywords: Generative AI, Health Care Applications, Artificial Intelligence, Medical Technology, Healthcare Innovation

Biography: Prof. Dr. MA. Jabbar is a Professor and Head of the Department AI&ML, Vardhaman College of Engineering, Hyderabad, Telangana, India. He obtained Doctor of Philosophy (Ph.D.) from JNTUH, Hyderabad, and Telangana, India. He has been teaching for more than 20 years. His research interests include Artificial Intelligence, Big Data Analytics, Bio-Informatics, Cyber Security, Machine Learning, Attack Graphs, and Intrusion Detection Systems. Member, IEEE Smart Cities Member, International Committee, IEEE Artificial Intelligence StandardsMember, Governing body, Internet Society India Hyderabad Chapter.

Keynote Speaker III

Time Converter: https://www.timeanddate.com/worldclock/meeting.html
Beijing Time (UTC+8), Saturday, June 28, 10:50-11:40
Vietnam Time (UTC+7), Saturday, June 28, 09:50-10:40

Name: Prof. Dr. Anand Nayyar, School of Computer Science, Duy Tan University, Da Nang, Vietnam
Speech Title: Quantum Communication: Trends and Outlook

Abstract: Quantum communication stands at the precipice of revolutionizing information security and computational capabilities, heralding a new era of interconnectedness. This keynote address will navigate the rapidly evolving landscape of quantum communication, dissecting pivotal current trends such as the advancements in Quantum Key Distribution (QKD) for unconditionally secure data transmission, the development of nascent quantum networks, and the exploration of quantum repeaters to extend communication distances. We will delve into the synergistic relationship between quantum communication and quantum computing, examining how these fields mutually propel innovation. Furthermore, the address will cast a forward-looking gaze towards the transformative potential of a global quantum internet, exploring the challenges and groundbreaking opportunities that lie ahead. This presentation will provide a comprehensive overview of the field's trajectory, offering insights into the technological milestones, research frontiers, and the profound societal and industrial implications anticipated in the coming decades as quantum communication transitions from theoretical frameworks to tangible, impactful applications.
Keywords: Quantum Technology, Quantum Communication, Quantum Trends, Quantum Key Distribution

Biography: Dr. Anand Nayyar received Ph.D (Computer Science) from Desh Bhagat University in 2017 in the area of Wireless Sensor Networks, Swarm Intelligence and Network Simulation. He is currently working in School of Computer Science-Duy Tan University, Da Nang, Vietnam as Professor, Scientist, Vice-Chairman (Research) and Director- IoT and Intelligent Systems Lab. A Certified Professional with 125+ Professional certifications from CISCO, Microsoft, Amazon, EC-Council, Oracle, Google, Beingcert, EXIN, GAQM, Cyberoam and many more. Published more than 200+ Research Papers in various High-Quality ISI-SCI/SCIE/SSCI Impact Factor- Q1, Q2, Q3, Q4 Journals cum Scopus/ESCI

indexed Journals, 80+ Papers in International Conferences indexed with Springer, IEEE and ACM Digital Library, 60+ Book Chapters in various SCOPUS/WEB OF SCIENCE Indexed Books with Springer, CRC Press, Wiley, IET, Elsevier with Citations: (Google Scholar): 15700+, H-Index: 66 and I-Index: 254; (Scopus): 8300+; H-index: 48. Member of more than 60+ Associations as Senior and Life Member like: IEEE (Senior Member) and ACM (Senior Member). He has authored/co-authored cum Edited 60+ Books of Computer Science. Associated with more than 600+ International Conferences as Programme Committee/Chair/Advisory Board/Review Board member. He has completed 1 Grassroot and 1 ASEAN Project. He has 18 Australian Patents, 14 German Patents, 4 Japanese Patents, 41 Indian Design cum Utility Patents, 13 UK Patents, 1 USA Patent, 3 Indian Copyrights and 2 Canadian Copyrights to his credit in the area of Wireless Communications, Artificial Intelligence, Cloud Computing, IoT, Healthcare, Drones, Robotics and Image Processing. Awarded 50 Awards for Teaching and Research—Young Scientist, Best Scientist, Best Senior Scientist, Asia Top 50 Academicians and Researchers, Young Researcher Award, Outstanding Researcher Award, Excellence in Teaching, Best Senior Scientist Award, DTU Best Professor and Researcher Award- 2019, 2020-2021, 2022, 2022-2023 Distinguished Scientist Award by National University of Singapore, Obada Prize 2023, Lifetime Achievement Award 2023; Asian Admirable Achievers 2024; Distinguished Academic Leader 2024 and many more.

Keynote Speaker IV

Time Converter: https://www.timeanddate.com/worldclock/meeting.html
Beijing Time (UTC+8), Saturday, June 28, 11:40-12:30
France Time (CEST, UTC+2), Saturday, June 28, 05:40-06:30

Name: Prof. Pascal Lorenz, University of Haute-Alsace, France
Speech Title: Architectures of Next Generation Wireless Networks

Abstract: Internet Quality of Service (QoS) mechanisms are expected to enable wide spread use of real time services. New standards and new communication architectures allowing guaranteed QoS services are now developed. We will cover the issues of QoS provisioning in heterogeneous networks, Internet access over 5G networks and discusses most emerging technologies in the area of networks and telecommunications such as IoT, SDN, Edge Computing and MEC networking. We will also present routing, security, baseline architectures of the inter-networking protocols and end-to-end traffic management issues.

Biography: Pascal Lorenz (11orenz@ieee.org) received his M.Sc. (1990) and Ph.D. (1994) from the University of Nancy, France. Between 1990 and 1995 he was a research engineer at WorldFIP Europe and at Alcatel-Alsthom. He is a professor at the University of Haute-Alsace, France, since 1995. His research interests include QoS, wireless networks and high-speed networks. He is the author/co-author of 3 books, 3 patents and 200 international publications in refereed journals and conferences. He was Technical Editor of the IEEE Communications Magazine Editorial Board (2000-2006), IEEE Networks Magazine since 2015, IEEE Transactions on Vehicular Technology since 2017, Chair of IEEE ComSoc France (2014-2020), Financial chair of IEEE France (2017-2022), Chair of Vertical Issues in Communication Systems Technical Committee Cluster (2008-2009), Chair of the Communications Systems Integration and Modeling Technical Committee (2003-2009), Chair of the Communications Software Technical Committee (2008-2010) and Chair of the Technical Committee on Information Infrastructure and Networking (2016-2017), Chair of IEEE/ComSoc Satellite and Space Communications Technical (2022-2023), IEEE R8 Finance Committee (2022-2023), IEEE R8 Conference Coordination Committee (2023). He has served as Co-Program Chair of IEEE WCNC'2012 and ICC'2004, Executive Vice-Chair of ICC'2017, TPC Vice Chair of Globecom'2018, Panel sessions co-chair for Globecom'16, tutorial chair of VTC'2013 Spring and WCNC'2010, track chair of PIMRC'2012 and

WCNC’2014, symposium Co-Chair at Globecom 2007-2011, Globecom’2019, ICC 2008-2010, ICC’2014 and ‘2016. He has served as Co-Guest Editor for special issues of IEEE Communications Magazine, Networks Magazine, Wireless Communications Magazine, Telecommunications Systems and LNCS. He is associate Editor for International Journal of Communication Systems (IJCS-Wiley), Journal on Security and Communication Networks (SCN-Wiley) and International Journal of Business Data Communications and Networking, Journal of Network and Computer Applications (JNCA-Elsevier). He is senior member of the IEEE, IARIA fellow and member of many international program committees. He has organized many conferences, chaired several technical sessions and gave tutorials at major international conferences. He was IEEE ComSoc Distinguished Lecturer Tour during 2013-2014.

Invited Speaker

Beijing Time (UTC+8), Saturday, June 28, 12:30-13:00

Name: Prof. Wen-Cheng Lai, Ming Chi University of Technology, Taiwan
Speech Title: Silicon Photonics on EA-Oscillator with ADC Controlled Design for Sensing Vibration

Abstract: This design of an optoelectronic oscillator demodulation is demonstrated for vibration sensor. The proposed demodulation comprises of Colpitts EA-VCO with current reuse, folded mixer, low-pass ladder filter, analog to digital converter, VCSEL photodiode and for optoelectronic applications. The integrated circuit combines MZM module for silicon photonics and heterogeneous integration in near feature.
Keywords: EA-VCO; ADC; folded mixer; lowpass ladder filter; VCSEL photodiode

Wen-Cheng Lai (Senior Member, IEEE) is currently an Assistant Professor with the Department of Electrical Engineering, Ming Chi University of Technology, New Taipei City, Taiwan. He has been involved in the RF, Analog IC Integrated Design, Computer and Communications and Artificial Intelligence. He joined USS, Compal Electronics, Inc., Micro Star Intl Co., Ltd, and Quanta Computer Inc laptop PC design as an senior engineer from 1998 to 2006, respectively, and he worked with Hon Hai (Foxconn) Precision Industry Co., Ltd as smart phone senior design engineer from 2006 to 2007. From 2008 to 2013, he was a Manager of Core Technology Division with Toshiba Corp,. From 2014 to 2017, he served in Director with AsusTek Computer Inc, and China Radio Association. And he was an Assistant Professor with the Dept of Electrical Engineering, National Penghu University of Science and Technology from 2018 to 2020. He was an Assistant Professor with the Dept of Electronic Engineering, National Yunlin University of Science and Technology from 2020 to 2023. He received the World Ranking Top 2% Scientists (2020~ until now) from Stanford University and Scopus Database.

Session #2 Oral Presentation

14:00—20:00, June 28, 2025

(10 mins presentation and 5 mins question time)

Session #2	Time	Paper Title	Author
B253	14:00-14:15	Comparative Analysis and Research on Rotational Performance of Swivle Joints	Nianpeng Wu, Yongjun Xia, Yong Ma, Fanhao Meng, Jianping Zhang and Yujing Hao
B344	14:15-14:30	Tim: An effective method for Data Timeliness Evaluation in Engineering Data Transmission	Xinyuan Lan and Chao Han
B365	14:30-14:45	3D Reconstruction of Flexible Cables Based on Binocular Vision	Jianguo Li, Naijing Lv, Xujie Song, Guoqiang Li, Yu Sun, Hao Chen, Zhinan Zhu and Wen Li
B1142	14:45-15:00	Research on Intelligent Assessment Method for Low-code Data Visualization Skills	Jimei Li, Yiling Guo, Shuxin Qin and Xin Chen
B1158	15:00-15:15	Temporal Dynamics Enhanced Sequential Recommendation with Adaptive Attention Mechanism	Qiao Li, Xing Xing, Zhichun Jia and Mindong Xin
B346	15:15-15:30	GDC: an Hybrid Method for Hierarchical Data Grading and Classification	Chao Han, Xinyuan Lan, Weinian Pan, Ke Huang, Shengjie Zhai, Xiaocong Chen, Xudong Li and Tian Tian
A436	15:30-15:45	Assessing Multimodal AI's Realized Value in Industrial Inspection with TEMAI	Haibing Ma, Zehan Li, Jinzhi Deng, Chi Zhang and Dan Xiao

A439	15:45-16:00	A Digital Modeling Method for Flexible Cables	Zhinan Zhu, Wen Li, Naijing Lv, Bo Wang, Dandan Li, Zheng Gong, Hao Chen and Jianguo Li
A1112	16:00-16:15	Integrating Sunflower Optimization with Recursive Feature Elimination for Biomarker Recognition	Yuanyuan Han
C253	16:15-16:30	Vibration Study of Eccentric Electrod Quartz Crystal Resonator	Junjie Shi, Hantao Guo, Yong Gao and Haiyu Miao
B299	16:30-16:45	Analysis of Factors Affecting the Temperature Measurement Accuracy and Application of Infrared Thermal Camera	Xuyin Gong, Maolin Wang, Benwang Li and Yuqin Wang
B340	16:45-17:00	Research on the Cybersecurity Classified Protection Model and Technology of 5G Application System	Yuan Tao, Moyan Li, Jing Xiao and Youjian Yao
A1109	17:00-17:15	Fault Detection Method for Port Equipment Using Modified Recurrent Neural Network	Kaixuan Qi and Yongnian Huang
17	17:15-17:30	Parametric Estimation of Respiratory Signals for ML-Based Early Detection of Sleep Apnea	Md NagibMahfuz Sunny, Abdullah Al Nahian, Dr. Syed Walid Ahmed, Jennet Atayeva and Zakia Sultana Munmun
11	17:30-17:45	Convergence Analysis of a Randomized Incremental Subgradient Method on Riemannian Manifolds	Peng Zhang
25	17:45-18:00	Anomaly Detection in Vehicular Ad-Hoc Networks (VANETs) Using a Hybrid Deep Learning Approach	K. Srividya, K. Hosmitha, K. Nikhil Reddy and M.A. Jabbar

3	18:00-18:15	A Scalable Framework for Sensing and Predicting Soil Conditions Using Machine Learning, IoT, and UAVs	Hao Qiu, Xianping Wang and Jiayue Shen
10	18:15-18:30	Designing, Simulating & Implementing a Zero Trust Network Architecture (ZTNA)	Abdel Rahman Alkharabsheh, Naeema Monther, Nabtah Hamdan, Shamma Mohamed, Khulood Hamad and Amna Ahmed
12	18:30-18:45	AI-Driven Proactive Framework for Cybersecurity Threat Prediction, Detection, and Attack Classification	Abdel Rahman Alkharabsheh, Fatima Hassan Alhosani, Mariam Hasan Alameri, AlyaziaBakhitAlrashdi, Fatima Mubarak Almenhali and Amna ArefAlzaabi

Session #3 Poster Presentation

14:00—20:00, June 28, 2025

Session #3	Paper Title	Author
38	Adaptive Federated Learning with Dynamic Resource Allocation for Distributed Big Data Analytics	Danish Reddy Agarampalli and Bhashitha Siddareddy
B302	Research on Coverage Statistics in Fuzz Testing of Closed-source DBMS	Zhongjie Li, Haotian Liang, Haoyang Jia, Qingxian Wang and Yan Cao
B343	Digital Twin-Driven 3D Visualization Platform for Accelerator Operation	Min Yue, Chao Yuan, Tao Ma and Shizhe Gou
B352	Research on Path Planning Method for Temporary Access Roads Based on AHP and ACA algorithm	Feikai Zhang, Songfeng Shi, Jian Qin, Yi Wang, Chen Liu and Liang Qiao
B1168	Research on Intelligent Fractal Lithological Feature Recognition Based on Big Data	Hong Guo and Junbiao Lin
C507	Hybrid Reasoning AI System for Nursing Ethics Education: Development and Randomized Controlled Trial	Xiaoxi Liu, Wei Meng and Chunhui Li
B255	Applications of Linear Algebra in Information Retrieval	Kun Zhang
B270	The impact of big data on the job performance of manufacturing employees	Zhang Xuewei, Xiao Huiyun, Gu Jianqiang, Xue Qinggen and Peng Feng

B287	Real Time Processing of Pulse Compression In Software Radar	Zhiwu Zhang, Changfei Cui and Jian Liu
B301	Security Protection Technology for Embedded Devices Based on Instruction Set Architecture Heterogeneity	Dalong Zhang, Haiqing Zhu, Yan Cao and Youwei Zhang
B303	MDP-FL: Multimodal Dynamic Purification Federated Learning	Chengyao Xue, Guojia Li, Mingyue Cao, Simin Xu, Yihong Zhang and Yan Cao
B313	Intelligent construction and performance optimization of educational resource sharing platform	Nailing Li
B314	AI Integration in Rural education: An Interactive Learning Resource Platform Approach	Chunling Tai and Gaofeng Lv
B318	University Innovation Capability Evaluation System Based on Big Data Technology	Xiaohong Zhang and Zihua Ji
B349	Research on Key Technologies and Architecture of Multi-source Heterogeneous Massive Data Middle Platform	Yunqi Chen
B355	A Methodology for the Study of MR Display Interface- Specificity Form Sense and Light Perception Metrics for Typical Maintenance Tasks in Narrow Confined Spaces	Rui Zhao, Hongqiang Yu, Bingkun Li, Bingxian Zhou, Guangshan Liao and Ting Jiang
B1139	Intelligent Routing of Roads for Wind Farms in Mountainous Areas based on GIS	Xinyang Ye, Si Cai, Chenming Tang and Zan Li

B1149	Contactless Fingerprint Enhancement Algorithm Based on Frequency Domain and Multi-Channel Gabor Filtering	Linqi Zhang, Jiaqi Gao and Yongzhong Hu
C180	Residential style recognition simulation application based on computer vision	Ling Wang
C254	Automobile Brand Analysis System Based on Feature Engineering and Apache Kafka+Flink Stream Data Processing Framework	Xuehong Wang, Jin Lu, Fan Zhang and Jing Yang
C508	Multi Level Bridging Emergency Multimedia Communication Network Congestion Control Algorithm	Yikun Geng
C1086	Hyperparameter Tuning and Its Application in Sentiment Analysis with Convolutional Neural Network	Wenwang Yang, Wenhao Zhong, Seena Joseph, Wei Chen, Changzhen Li and Luyao Du
C1089	A Multi-Expert Intelligent Agent Reinforcement Learning Training Method Based on Cluster Confrontation	Yalei Niu, Xun Li, Ningyan Zhang and Yunhui Wang
A436	Assessing Multimodal AI's Realized Value in Industrial Inspection with TEMAI	Haibing Ma, Zehan Li, Jinzhi Deng, Chi Zhang and Dan Xiao
A437	Obstacle Avoidance Trajectory Planning of Manipulator Based on Improved RRT Algorithm	Tengfei Chen, Tingjun Wang, Penghui Yang, Hewei Qu, Maolin Guo, Zhongshuai Zhao and Baoshan Yan
A438	An Efficient Spark-Based Framework for E-Commerce Data Analysis and Processing	Weifeng Lu, Long Zhang, Jing Shen and Nan Jiang

A439	A Digital Modeling Method for Flexible Cables	Zhinan Zhu, Wen Li, Naijing Lv, Bo Wang, Dandan Li, Zheng Gong, Hao Chen and Jianguo Li
A1188	GALA: Group Merging Artificial Lemming Algorithm for Gene Selection	Yuanyuan Han
B291	Research on Traffic Organization Optimization Method Based on Computer Virtual Simulation System	Qiang Zhang, Dong Cui and Fengdong Zhang
B353	Face Illustration Diffusion Generation System Based on Instant ID Model	Tiancheng Ming and Chengzhang Qu
A1197	Subspace Merging-Enhanced Integrated Metaheuristics for High-Dimensional Gene Selection	Yuanyuan Han
S1115	Distribution Path Optimization with Multiple Depot based on an Improved Distribution Estimation Algorithm	Meijia Chen, Fahong Yu and Dongping Zhu

ICCSTE2025 Table of Content

B355

A Methodology for the Study of MR Display Interface- Specificity Form Sense and Light Perception Metrics for Typical Maintenance Tasks in Narrow Confined Spaces

Rui Zhao, Hongqiang Yu, Bingkun Li, Bingxian Zhou, Guangshan Liao and Ting Jiang

B365

3D Reconstruction of Flexible Cables Based on Binocular Vision

Jianguo Li, Naijing Lv, Xujie Song, Guoqiang Li, Yu Sun, Hao Chen, Zhinan Zhu and Wen Li

B1139

Intelligent Routing of Roads for Wind Farms in Mountainous Areas based on GIS

Xinyang Ye, Si Cai, Chenming Tang and Zan Li

B1142

Research on Intelligent Assessment Method for Low-code Data Visualization Skills

Jimei Li, Yiling Guo, Shuxin Qin and Xin Chen

B1149

Contactless Fingerprint Enhancement Algorithm Based on Frequency Domain and Multi-Channel Gabor Filtering

Linqi Zhang, Jiaqi Gao and Yongzhong Hu

B1158

Temporal Dynamics Enhanced Sequential Recommendation with Adaptive Attention Mechanism

Qiao Li, Xing Xing, Zhichun Jia and Mindong Xin

B1168

Research on Intelligent Fractal Lithological Feature Recognition Based on Big Data

Hong Guo and Junbiao Lin

A1112

Integrating Sunflower Optimization with Recursive Feature Elimination for Biomarker Recognition

Yuanyuan Han

C180

Residential style recognition simulation application based on computer vision

Ling Wang

C253

Vibration Study of Eccentric Electrod Quartz Crystal Resonator

Junjie Shi, Hantao Guo, Yong Gao and Haiyu Miao

ICCSTE2025 COMMITTEE LIST

Technical Committee Chairs

Prof. Pascal Lorenz, University of Haute Alsace, France

Prof. S.Rajesh, Mepco Schlenk Engg College, India

Prof. Jun Tao, College of Artificial Intelligence, Jianghan University, China

Prof. Anand Nayyar, Duy Tan University, Viet Nam

Program Committee Chairs

Prof. Samir Ladaci, Ecole Nationale Polytechnique, Algeria

Prof. Gyu Myoung Lee, Liverpool John Moores University, UK

Dr. Tamer Zakaria Emara, Faculty of Computers and Artificial Intelligence, Damietta University, Egypt

Prof. Dr. Jun Tao, Jianghan University, China

Prof. Ma. Jabbar, Vardhaman College of Engineering, India

Prof. Tan-Jan Ho, Dept. of Electrical Engineering, Chung Yuan Christian University, Taiwan

Prof. Rafael Caldeirinha, Instituto de Telecomunicações, Polytechnic University of Leiria, Portugal

Prof. Tao Yu, China Academy of Management Science, China

Prof. Mihaela Popescu, Faculty of Electrical Engineering, University of Craiova, Romania

Prof. Yuanyan Tang, The University of Macau, China

Prof. Chunzhi Wang，College of Computer Science, Hubei University of Technology, China

Prof. Shyi-Ming Chen, Department of Computer Science and Information Engineering, Asia University, Taiwan

Publication Chair

Prof. Dr. MA. Jabbar, Head of the Department CSE(AI&ML), Vardhaman College of Engineering, Hyderabad, India

Co-Editors

Prof. Hong Lin, Computer Science and Engineering Technology,University of Houston-Downtown (UHD), USA

Prof. Gyu Myoung Lee, Liverpool John Moores University, UK

Prof. FELLAH Mamoun, Abbes LAGHROUR University, Algeria

Prof. DR. SIMON K.S. CHEUNG,Chief Information Officer, Hong Kong Metropolitan University,Hong Kong, China

Local Committee Members

Prof. Huamin Wang, Wuhan University, China

Prof. Xiaoliang Meng, Wuhan University, China

Prof. Jiangping Chen, Wuhan University, China

Ass.Prof. Jiangyi Du, Wuhan University, China

Prof. Jun Tao, College of Artificial Intelligence, Jianghan University, China

Prof. Chunzhi Wang，College of Computer Science, Hubei University of Technology, China

Conference Secretary

Dr. Lina Cai, Local Committee, China

Technical Program Committee

Prof. Antonio Muñoz, University of Malaga, Spain

Dr. Isidoros Perikos, University of Patras, Greece

Prof. Samir Ladaci, Ecole Nationale Polytechnique, Algiers, Algeria

Prof. Dan Dobrota, Lucian Blaga University of Sibiu, Romania

Prof. Gyu Myoung Lee, Liverpool John Moores University, UK

Prof. Chuan-Ming Liu, National Taipei University of Technology, Taiwan

Asst. Prof. Pankaj Bhambri, I.K. Gujral Punjab Technical University, Jalandhar, India

Dr. Tamer Zakaria Emara, Faculty of Computers and Artificial Intelligence, Damietta University, Egypt

Dr. Sachin Kumar, Galgotias College of Engineering and Technology, Greater Noida, India

Prof. Anil Kumar Verma, Thapar Institute of Engg. & Tech., Deemed University, India

Prof. Shing-Tai Pan, Department of Computer Science and Information Engineering, National University of Kaohsiung, Taiwan

Prof. Abdel-Badeeh M Salem, Ain Shams University, Egypt

Prof. Wenfeng Wang, Shanghai Institute of Technology, China

Prof. Atanaska Bosakova-Ardenska, Department of Computer Systems and Technologies, University of Food Technologies, Bulgaria

Prof. Daniela Litan, Exact and Engineering Sciences Faculty, Department of Informatics, Hyperion University, Romania

Prof. Anand Nayyar, Duy Tan University, Viet Nam

Prof. Gheorghe Grigoras, Technical University of Iasi, Romania

Prof. Yonggui Kao, School of Computer Science and Technology, Harbin Institute of Technology at Weihai, China

Prof. Dr. Jun Tao, Jianghan University, China

Prof. Cheng-Ying Yang, Department of Computer Science, University of Taipei, Taiwan

Prof. Ma. Jabbar, Vardhaman College of Engineering, India

Prof. Tan-Jan Ho, Dept. of Electrical Engineering, Chung Yuan Christian University, Taiwan

Prof. Rafael Caldeirinha, Instituto de Telecomunicações, Polytechnic University of Leiria, Portugal

Prof. Batool-Eneaze Al-Jumaili, Fallujah University, Iraq

Prof. Dr. Ali Fadhil Naser, Al-Furat Al-Awsat Technical University, Iraq

Prof. Farn Wang, National Taiwan University, Taiwan

Dr. Abel C. H. Chen, Chunghwa Telecom Laboratories, Taiwan

Prof. Dr. Zaki Sari, Manufaturing Engineering Laboratory of Tlemcen, University of Tlemcen, Algeria

Prof. Shyi-Ming Chen, Asia University, Taiwan

Prof. Seonkwan Han, Department of Computer Education, Gyeongin National University of Education, Korea
Prof. Tao Yu, China Academy of Management Science, China
Prof. Mihaela Popescu, Faculty of Electrical Engineering, University of Craiova, Romania
Prof. Mehdi Vafakhah, TarbiatModares University, Iran
Asst. Prof. Mani Zarei, Department of Computer Engineering, Islamic Azad University, Iran
Prof. Hsing-Wen Wang, National Changhua University of Education, Taiwan
Asst. Prof. Fateh Boutekkouk, Department of Computer, Oum El Bouaghi University, Algeria
Asst. Prof. Jagadeesha R Bhat, Indian Institute of Information Technology Dharwad, India
Prof. Lamri Sayad, University of M'sila, Algeria
Prof. Abdelber Bendaoud, Sidi Bel-Abbès University, Algeria
Prof. Min-Shiang Hwang, Department of Computer Science and Information Engineering, Asia University, Taiwan
Acc. Prof. Noor Zaman, Taylor's University, Malaysia
Mr. Nagarjuna Malladi, Oracle America, Inc., USA
Dr. Malek Hassanpour, Osmania University, India
Prof. DERRADJI El Fadel, Badji Mokhtar University, Algeria
Dr. Theodoros Chrysanidis, D.U.Thailand, Thailand
Prof. El-Gendi Ayman Taha Abdelaziem, Canal High Institute for Engineering & Technology-Suez-Egypt and National Research Centre (NRC), Egypt
Dr. Lei Wang, University of Connecticut, USA
Dr. Yasin POLAT, Nevsehir Haci Bektas Veli University, Turkey
Prof. Srđan Kostić, Jaroslav Černi Water Institute / Faculty of Technical Sciences (University of Novi Sad), Serbia
Dr. Ramayah Thurasamy, Universiti Sains Malaysia, Malaysia
Dr. Sarâh Benziane, USTO MB Algeria, Algeria
Dr. Habil. Corneliu Doroftei, Alexandru Ioan Cuza University of Iasi, Romania
Dr. Khalid A. AlAfandy, Abdelmalek Essaadi University, Morocco
Dr. Fathollah Bistouni, Islamic Azad University, Iran
Dr. Sachin Kumar, SRM Institute of Science and Technology, India
Dr. Navid Vafamand, Shiraz University, Iran
Prof. Latefa SAIL, Aboubekr Belkaid University, Algeria
Dr. Phongsak Phakamach, Rajamangala University of Technology Rattanakosin, Thailand
Prof. G.Sanjiv Rao, Aditya College of Engineering and Technology, India
Prof. S.Rajesh, Mepco Schlenk Engg College, Sivakasi
Dr. Behrouz Moarref, Islamic Azad University, Iran
Dr. Manisha G Waje, G H Raisoni College of Engineering & Management, Pune
Prof. Feilong Wu, Xi'an Aeronautical University, China
Dr. Yangyang Zhang, Hebei University of Science and Technology, China
Asst. Prof. Dalal Hammood, College of Electrical & Electronic Eng. Techniques, Middle Technical University, Iraq
Assoc. Prof. Xilong Liu, Yunnan University, China

Dr. Sree Priyanka Uppu, Amazon Web Services (AWS), USA

Dr. Amit Shivpuja, Director of Data Product, Governance and Strategy, Merchandising Walmart, USA

Dr. Chetan Prakash, Sr Manager, Capgemini America Inc., Chicago, IL, USA

Dr. Mayank Rai, Engineering Group Manager, General Motors Corp. (GM), Warren, MI, USA