

Day 1 – Friday – October 27th 2023 (Beijing Time)

14:00 to 21:00 Check in

Day 2 – Saturday – October 28th 2023 (Beijing Time)

9:00-9:50 Opening ceremony / Welcome message

9: 50-10:20 Group photo on site / Tea break

10: 20-11:00 Keynote speaker 1

Prof. Chong-Yung Chi“Convergence of Convex Optimization & Artificial Intelligence”

11:00 -11:40 Keynote speaker 2

Prof. Huaglory Tianfield“Decentralised Edge Intelligence with Federated Learning and Blockchain Technology”

11:40 – 12:00 Campus tours

12:00 – 14:00 Lunch Break / Noon break

14:00-18:00 Forum reports

14:00 A New Method of Integrated Radar-Communication System Waveform Design and Signal Processing Based on OFDM Block Subcarrier Allocation
Cong Quan (Beijing Information Science and Technology University), Zhan Xu (Beijing Information Science and Technology University), Weige Zhu (Shanghai Institute of Satellite Engineering), and Xiaolong Yang (Beijing Information Science and Technology University)

14:12 Optimal Access Point Selection Approach for User-Centric Cell-Free Massive MIMO Systems
Weifeng Ma, Xinghua Sun, Xijun Wang, and Wen Zhan (Sun Yat-sen University)

14:24 A lip-print recognition algorithm based on grouped multi-scale feature fusion
Hongcheng Zhou (Jinling Institute of Technology)

14:36 Research on Big Data Information Big Model Processing System of Internet of Things Under Computer Artificial Intelligence Technology
Qiong Ren, Xi Hu, and Junming Chang (Jiangnan University)

14:48 SVM Multi-class Classification method for Device Identification Using Eye Diagram Parameters
Jian Yuan, Aiqun Hu (Southeast University)

15:00 A novel HPSO-IGWO algorithm for rapidly searching optimal fire rescue paths based on IoT architecture

Yifan Xu, Xinpeng Wang, Xiaode Chen, Jin Zheng, Xin Xiong, and Xi Hu (Jiangnan University)

15:12 Peak Age of Information Optimization: CSMA versus Aloha
Dewei Wu, Wen Zhan, Xinghua Sun, and Jiyun Qiu (Sun Yat-sen University)

15:24 Cooperative Coded Caching in Internet of Vehicles based on Coded Prefetching
Yifan Lin, Congduan Li (Sun Yat-sen University)

15:36 Design and Research of Intelligent Sorting Trash Bin Based on IoT
Yuxi Yang, Yuanqiao Bi, Fuxiang Jiang, Zhongying Hu, Weile Bai, Qifang Liu, and Xi Hu (Jiangnan University)

15:48 HPSO-WOA-SFO: A Novel Hybrid Swarm Intelligence Approach for Enhancing Discrete Road Path Planning
You Wu (Hubei University), Xi Hu (Jiangnan University), and Guosheng Zhu (Hubei University)

16: 00-16:20 Tea Break

16:20 Spatio-Temporal Traffic Prediction of Wireless Communication Network Based on Multi-Source Data

Yu Wang (China United Network Communications Corporation Limited), Yangyang Sun (China United Network Communications Corporation Limited), Yanlin Fan (China United Network Communications Corporation Limited), Tao Jiang (China United Network Communications Corporation Limited), Jiansheng Xiong (China United Network Communications Corporation Limited), Ying Zhou (China United Network Communications Corporation Limited), and Zhibo Han (Beijing University of Posts and Telecommunications)

16:32 A Q-Learning Approach to Energy-Efficient Routing in BLE Mesh Network Based on Duty Cycle Scanning
Longrong Jiang, Jing Liu, Lan Wang (Shenzhen University)

16:44 Improved Plate Defect Detection Algorithm Based on YOLOv5
Zijie Wang (Shenzhen University), Lan Wang (Shenzhen University), Sihui Zheng (Tsinghua University)

16:56 A Hybrid WOA-MTCNN Algorithm for Accurate Face Detection Based on IoT Architecture
Xi Hu, Hang Ruan, Xin Xiong, Siqi Zhang, Ning Huang, and Jun Wang (Jiangnan University)

17:08 Users Collaborative Computing for Hierarchical Federated Learning Based on Incentive Mechanism
Bei Zhuang (Beijing University of Posts and Telecommunications), Yueying Li (Beijing University of Posts and Telecommunications), Ji Ma (Jinling Institute of Technology), Jin Tian (Jinling Institute of Technology), Chunhong Zhang (Beijing University of Posts and Telecommunications), and Zheng Hu (Beijing University of Posts and Telecommunications)

17:20 Flying Ad-Hoc Network Routing Protocol Based on Backward Algorithm
Zheng Yu and Jianguo Yu (Beijing University of Posts and Telecommunications)

17:32 The Intelligent Application of IoT and 3D Visualization Technology
Huarong Huang (Jiangsu Integrity Transport Technology Co., Ltd), Lu Guan (Wu Han Polytechnic University), Chengyong Bao (Jiangsu Integrity Transport Technology Co., Ltd), Leijin Yang (Jiangsu Integrity Transport Technology Co., Ltd), and Leilei Chen (Southeast University)

17:44 Highway obstacle recognition based on improved YOLOv7 and defogging algorithm
Mingliang Fan, Jing Liu, and Jiaming Yu (Jinling Institute of Technology)

Day 3 – Sunday – October 29th 2023 (Beijing Time)

8:30-12:00 Forum reports

8:30 Dynamic scheduling strategy based on demand prediction of shared bike
Xiangkai Qiu, Wenbing Yang, Haoyang Zhou, and He Wang (Beijing University of Posts and Telecommunications)

8:42 Study on Demand Forecasting and Scheduling Routes of Shared Bicycles
He Wang, Haoyang Zhou, Weibing Yang, and Xiangkai Qiu Wang (Beijing University of Posts and Telecommunications)

8:54 Cloud gaming resource management platform based on edge intelligence
Yang Hu, Yunsong Xie, Jiaye Li, Maoyu Wang, Xunjie Su, and Guanlin Li (Beijing University of Posts and Telecommunications)

9:06 Hardware-efficient Polar Decoder for 5G Internet of Things Communication
Jing Gao and Congduan Li (Sun Yat-sen University)

9:18 Research on Borehole Detection in Underground Drilling Based on Spatial 3D Motion Perception
Yuhang Jiang (Jinling Institute of Technology), Jiming Yu (Jinling Institute of Technology), Wenfeng Wang (Mining branch of Nanjing Baodi Meishan Industrial City Development Co. Ltd), Miao Chen (Jinling Institute of Technology), Mingming Zhang (Jinling Institute of Technology), and Wentao Qu (Jinling Institute of Technology)

9:30 Highway Image Enhancement Method Based on improved Jade
Jing Liu, Yang Li, Shengxiang Wang, and Jin Tian (Jinling Institute of Technology)

9:42 Bone Age Detection Algorithm Based on YOLOv8 and ResNet34 Combined with RUS-CHN
Wenshun Sheng and Jiahui Shen (Pujiang Institute, Nanjing Tech University)

9:54 Deep Reinforcement Learning-based channel and power allocation in Multibeam LEO Satellite Systems
Junrong Li, Fuzhou Peng, Xijun Wang, and Xiang Chen (Sun Yat-sen University)

10:06-10:26 Tea Break

10:26 A Study on Collaborative Lane Change Decision Making of Multi-Automated Vehicles Based on Deep Graph Reinforcement Learning

Xiang Li (Harbin Institute of Technology), Jianxun Cui (Harbin Institute of Technology), and Haozhe Ji (Jiamusi University)

10:38 A Short Term Traffic Prediction Model Based on Deep Capture of Temporal Periodic Drift

Yong Liu (Harbin Institute of Technology), Jianxun Cui (Harbin Institute of Technology), and Zhaohua Long (Chongqing Hualian Zhongzhi Technology Co., Ltd.)

10:50 Multi-Agent Reinforcement Learning for Cooperative On-Ramp Merging of Connected Automated Vehicles

Boyuan Zhao (Harbin Institute of Technology) and Jianxun Cui (Harbin Institute of Technology)

11:02 Nonlinear PID Controllers Improved Based on Quad Rotor Aerial
Hongcheng Zhou (Jinling Institute of Technology)

11:14 Baesd on the Nonlinear State Equations of 6-DOF nonlinear Robot with Application to Autonomous Flight

Hongcheng Zhou (Jinling Institute of Technology)

11:26 Design and Optimization of a Solar-Powered IRS and Relay Assisted MEC System

Kai Xu, Xuwei Huang, and Gaofei Huang (Guangzhou University)

12:00 – 14:00 Lunch break / Noon break

14:00-18:00 Panel session in the enterprise / Meeting ends and return journey