

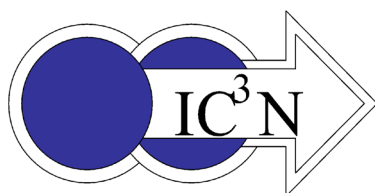
ICCCCN 2025

**The 34th International Conference on
Computer Communications and Networks**

August 4 – August 7, 2025

Technical Program

Tokyo, Japan



ICCCN 2025 Program Overview

August 3, 2025: Registration Desk Opens, 9pm-10pm, in front of Sakura room.

August 4, 2025 (Monday, Local times in Tokyo, Japan)

7:30	Registration Open		
8:15-8:30	Opening Remarks Room: Sakura		
8:30-9:30	Keynote I: Building the Next-Generation Social Infrastructure through AI-RAN and 6G Innovations Speaker: Mr. Ryuji Wakikawa, AI-RAN, Softbank, Japan Chair: Aki Nakao, University of Tokyo Room: Sakura		
9:30-10:00	Coffee Break		
(Rooms)	Asakaze	Shunyo	Matsukaze
10:00-12:00	Session 1 (Conf): Infrastructure Networking Technologies	Session 2 (Conf): IoT and Cyber-Physical Systems	Session 3 (Invited 1): Artificial Intelligence and Wireless Communication and Network
12:00-13:30	Lunch (on your own)		
13:30-15:00	Panel #1 (Room Sakura) Develop a Next Generation Cyber Resilient Mobile Digital Infrastructure Moderator: Dr. Abhimanyu Gosain, Senior Director Institute for Wireless Internet of Things, College of Engineering, Northeastern University Panelists: <ul style="list-style-type: none">Dr. Arupjyoti (Arup) Bhuyan, Idaho National Laboratory, USARichard Russell, Radisys Corporation, USADr. Aki Nakao, University of Tokyo, Japan		
15:00-15:30	Coffee Break		
15:30-17:30	Session 4 (Conf): Edge and Cloud Computing I	Session 5 (Conf): Security, Privacy, and Trust I	Session 6 (Invited 2): Applications and Wireless Communications/Network (Invited Talks 2)
18:30 – 20:00	Conference Reception (Room Fuji)		
August 5, 2025 (Tuesday, local times in Tokyo, Japan)			
8:00	Registration Open		
8:30-9:30	Keynote #2 (Room: Sakura) The Future of Connectivity: The Interplay of Resilience, Sustainability, and		

	Efficiency in 6G Speaker: Prof. Matti Latva-aho, Director for 6G Flagship, University of Oulu, Finland Chair: Aki Nakao, University of Tokyo		
9:30-10:00	Coffee Break		
(Rooms)	Asakaze	Shunyo	Matsukaze
10:00-12:00	Session 7 (Conf): Network Architecture, Algorithm, Protocol, and Evaluation I	Session 8 (Conf): AI-Enabled Communications and Networks	Session 9 (Invited 3): Emerging Technology and Wireless Communications/Network
12:00-13:30	Lunch (on your own)		
13:30-15:00 TBD	Panel #2 (Room: Sakura) Challenges and Opportunities of NTN networks deployments Moderator: Dr. Maria Guta, Satellite Telecommunications Engineer, European Space Agency Panelists: <ul style="list-style-type: none">• Luca Lodigiani, Aalyria Technologies, USA• Masamitsu Tsukui, Rohde & Schwarz, Japan• Dr. Klaus Michel, Airbus Defence and Space, Germany• Muneaki Ogawa, SKY Perfect JSAT, Japan		
15:00-15:30	Coffee Break		
15:30-17:30	Session 10 (Conf): Security, Privacy and Trust II	Session 11 (Conf): Emerging Topics in Networking	Session 12 (Invited 4): Security/Privacy and + CPS
18:30 – 20:30	Conference Banquet (Room Fuji)		
August 6, 2025 (Wednesday, Local times in Tokyo, Japan)			
8:00	Registration Open		
8:30-9:30	Keynote #3 (Room: Sakura) Revolutionizing Datacenter Networks via Reconfigurable Topologies Speaker: Prof. Stefan Schmid, TU Berlin Chair: Krishna Kant, Temple University		
9:30-10:00	Coffee Break		
(Rooms)	Asakaze	Shunyo	Matsukaze
10:00-12:00	Session 13 (Conf): Network Architecture, Algorithm, Protocol, and Evaluation II	Session 14 (Conf): Pervasive Communications, Networking and Sensing	Session 15 (Invited 5): Cloud/Edge and Wireless Communications/Network
12:00-13:30	Lunch (on your own)		
13:30-15:00	Session 16 (Conf): Edge and Cloud	Session 17 (Conf): Security, Privacy, and Trust	Session 18 (Conf – Short): Network Architecture, Algorithm,

	Computing II	III	Protocol, and Evaluation - S
15:00-15:30	Coffee Break		
15:30-18:00	Session 19 (Conf – Short): Security, Privacy, and Trust - S	Session 20 (Conf – Short): Edge and Cloud Computing & AI Networking – S	Session 21: Posters
August 7, 2025 (Thursday, Local times in Tokyo, Japan)			
8:00: Registration Open			
(Rooms)	Asakaze	Shunyo	Matsukaze
8:30-10:00	Session 22 (Conf – Short): IoT and Emerging Networks	Session 23 (WK 1): SoftIoT + IoTPST + ISCC-IoT (3+1+1)	Session 24 (WK 2): BDSSN 1 (5)
10:00-10:30	Coffee Break		
10:30-12:00	Session 25 (WK 3): BDMLN (5)	Session 26 (WK 4): AIECN (Keynote) + Quantum (2)	Session 27 (WK 5): BDSSN 2 + SCIAN (4+1)
12:00-13:30	Lunch (on your own)		
13:30-14:30	Session 28 (WK 6): EAI-IoT (5)	Session 29 (WK 7): AIECN 2 (6)	Session 30 (WK 8): HRLLC in 6G 1 (5)
14:30-15:00	Coffee Break		
15:00-17:00	Session 31 (WK 9): VENITS + COHEREENT (4+3)	Session 32 (WK 10): AIECN 3 (7)	Session 33 (WK 11): HRLLC in 6G 2 + DISCS (5+2)

ICCCN 2025 Technical Program

August 4 (Monday)

8:30-9:30 TBD

Keynote I: Building the Next-Generation Social Infrastructure through AI-RAN and 6G Innovations

Speaker: Mr. Ryuji Wakikawa, AI-RAN, Softbank, Japan

Chair: Aki Nakao, University of Tokyo

9:30-10:00 Coffee break

10:00-12:00

Session 1: Infrastructure Networking Technologies

Chair: Yuchao Zhang

- **Flexnetic: Cost-Effective and Smooth Evolution of Optical Backbone**
Zhiquan Wang, Congcong Miao, Yiren Zhao, Kunling He and Jilong Wang
- **SRv6-ALINT: SRv6-based Efficient In-band Network-Wide Telemetry across LANs**
Kaixiang Yu, Songlin Chen, Fuliang Li, Jiaying Shen and Xingwei Wang
- **Towards High-Performance and Compatible RDMA Networks with Receiver-Based and Fine-Grained Congestion Control**
Jun Xu, Jianchun Liu, Hongli Xu, Yangming Zhao and Zhuolong Yu
- **Network Resource-Aware Multi-job Deployment in Deep Learning Clusters**
Ai Zhong, Gongming Zhao, Hongli Xu, Jin Fang, Jiawei Liu and Peng Yang
- **Resolving Congestion Packet Losses for Small Flows in Datacenter Networks with Link-local Retransmission**
Jun Wang, Yuchao Zhang and Wendong Wang
- **Admission Control for mMTC Traffic with Computation Requirements in 5G Networks**
Fidan Mehmeti and Wolfgang Kellerer

Session 2: IoT and Cyber-Physical Systems

Chair: Junggab Son

- **Air-Ground Covert Cooperative Cognitive Radio Networks**
Qunshu Wang, Chengwen Xing, Nan Zhao and Dusit Niyato
- **DiffPhys: Differential Physics Augmentations for Enhanced Representations**
Denizhan Kara, Tomoyoshi Kimura, Dachun Sun, Jinyang Li, Yizhuo Chen, Yigong Hu, Hongjue Zhao, Joydeep Bhattacharyya and Tarek Abdelzaher
- **SDN-Based False Data Detection with Its Mitigation and Machine Learning Robustness for In-Vehicle Networks**
Long Dang, Thushari Hapuarachchi, Kaiqi Xiong and Yi Li
- **Efficient Phishing Website Detection via HTML Tag Sequence Analysis Using Encoder Models**
Jemin Ahn, Zuobin Xiong, Homook Cho, Kyungtae Kang and Junggab Son
- **Scalable Path Planning in Large-scale Networks Using Attention-Based Reinforcement Learning with Map-Driven Reward Matrices**
Guojiang Shen, Guowen Li, Yuchao Zhang, Xiangjie Kong and Ivan Lee
- **The Adaptive GMM for Rician Parameters Estimation in Industrial IoT Systems with reverse KLD to Distinguish Redundant Kernels**
Yifan Cao, Yuheng Li, Zhipeng Huang, Xuewu Dai, Wuxiong Zhang and Fei Qin

Session 3 (Invited 1): Artificial Intelligence and Wireless Communication and Network

Chair: Krishna Kant

- **Pegasus: Efficient Asynchronous Three-Layer Federated Learning**
Chen Ying and Baochun Li
- **The Irrational LLM: Implementing Cognitive Agents with Weighted Retrieval-Augmented Generation**
Dachun Sun, You Lyu, Jinning Li, Xinyi Liu, Denizhan Kara, Christian Lebiere and Tarek Abdelzaher
- **Structure Perturbation on Vertical Graph Federated Learning for Defending Inference Attack**
Taiyu Wang, Haodong Chen, Qi Lin, Junbo Wang and Yu Han
- **Savitar: A Multi-Timescale Spectrum-Efficient Scheduler for O-RAN**
Shiva Acharya, Shaoran Li, Wenjing Lou and Y. Thomas Hou

12:00 – 13:30 Lunch break

13:30-15:00 TBD

Panel I: Develop a Next Generation Cyber Resilient Mobile Digital Infrastructure

Moderator: Dr. Abhimanyu Gosain, Senior Director Institute for Wireless Internet of Things, College of Engineering, Northeastern University

Panelists:

- Dr. Arupjyoti (Arup) Bhuyan, Idaho National Laboratory, USA
- Richard Russell, Radisys Corporation, USA
- Dr. Aki Nakao, University of Tokyo, Japan

15:00-15:30 Coffee break

15:30-17:30

Session 4: Edge and Cloud Computing I

Chair: Fidan Mehmeti

- **Federated Learning Framework with Personalized Model Compression and Privacy Protection**
Ding Chenlin, Xiao Mingjun, Xu Yin and Wu Jie
- **AI-Driven NFV Service Chaining Across the Edge-to-Cloud Continuum: Placement, Fairness, and Coordination**
Javier Palomares, Estefanía Coronado, Cristina Cervelló-Pastor and Muhammad Shuaib Siddiqui
- **Heterogeneous Client Selection Method for Federated Learning based on Analytic Hierarchy Process and Lyapunov Optimization in Mobile Edge System**
Zhaohua Zheng and Junhui Du
- **Maximizing Profit With Energy-Efficient 5G Edge Orchestration**
Endri Goshi, Hongyu Guo, Fidan Mehmeti and Wolfgang Kellerer
- **SealOS+: A SealOS-based Approach for Adaptive Resource Optimization Under Dynamic Workloads for Securities Trading System**
Haojie Jia, Zhenhao Li, Gen Li, Minxian Xu and Kejiang Ye
- **CCRSat: A Collaborative Computation Reuse Framework for Satellite Edge Computing Network**
Ye Zhang, Zhishu Shen, Dawen Jiang, Xiangrui Liu, Qiushi Zheng and Jiong Jin

Session 5: Security, Privacy, and Trust I

Chair: Pierre Alain

- **MalVIS: A pyramid vision transformer V2 (PVTv2) based framework for android malware detection**

Devnath Devnath, Manoneet Mahesh Sikhwal and Basant Subba

- **BL-DKF: A Robust IoT Sensor Data Anomaly Detection Method**
Sakib Shahriar Shafin, Gour Karmakar, Iven Mareels and Ramachandra Rao Kolluri
- **Round Sketch: A Generic and Efficient Network Measurement Framework over Sliding Window**
Peng Zhao, Hua Wu, Deyu Zhao, Siyuan Zhou, Xianlong Dai, Yuyu Zhao and Guang Cheng
- **Mcufuzz: A Symbolic Execution-Based Directed Fuzz Framework for IoT Embedded Firmware**
Shangru Zhao, Zelin Yang and Yuqing Zhang
- **On the relevance of Blockchains for DDoS Mitigation: a Methodological Assessment and Performance Evaluation of Hyperledger Fabric**
Constant Rohmer, Pierre Alain, Mohamed Aymen Chalouf and Guillaume Doyen

Session 6 (Invited 2): Applications and Wireless Communications/Network

Chair: Chin-Tser Huang

- **Weather-Aware Power Control for Decentralized V2V Communication**
Jian Liu and Chin-Tser Huang
- **Attaining Loop-Free Routing with Coordinated Updates Carrying Minimum Link-State Information**
Jj Garcia-Luna-Aceves and Morteza Moghaddassian
- **Communication Optimization for Decentralized Learning atop Bandwidth-limited Edge Networks**
Tingyang Sun, Tuan Nguyen and Ting He
- **M3 Wavenet: Multiband Massive Wavelength-Multiplexing Metro Networks Enabling User Direct Wavelength Connection**
Takashi Miyamura, Satoru Okamoto, Masahiko Jinno and Naoaki Yamanaka
- **Computing the Saturation Throughput for Heterogeneous p-CSMA in a General Wireless Network**
Faezeh Dehghan Tarzjani and Bhaskar Krishnamachari
- **Identification of Deployment Environments Based on Link Quality Fluctuation Patterns**
Waltenegus Dargie, Sajad Farrokhi, Abiy Tasissa and Christian Poellabauer

18:30-20:00

Conference Reception

August 5 (Tuesday)

8:30-9:30

Keynote II: The Future of Connectivity: The Interplay of Resilience, Sustainability, and Efficiency in 6G

Speaker: Prof. Matti Latva-aho, Director for 6G Flagship, University of Oulu, Finland

Chair: Aki Nakao, University of Tokyo

9:30-10:00 Coffee break

10:00-12:00

Session 7: Network Architecture, Algorithm, Protocol, and Evaluation I

Chair: Susmit Shannigrahi

- **MDTP---An Adaptive Multi-source Data Transfer Protocol**
Sepideh Abdollah, Craig Partridge and Susmit Shannigrahi
- **CT-PIFO: A Congruity Tree Based Packet Scheduler to Improve Flow Completion Time**

Pralhad Magadum, Sourabh Singh and Aniruddha Singh Kushwaha

- **Improving Drone Communication QoS Through Adaptive Redundancy**
Robin Laidig, Fatima Shibli, Burak Tufekci, Frank Dürr and Cihan Tunc
- **NDN4VKN: A Simulation Framework for Supporting Vehicular Knowledge Networks**
Ali Nadar, Jerome Harri, Mohammad Irfan Khan and Seyhan Ucar
- **Efficient Optimization-based Routing Strategies for Large-Scale Multi-Layer LEO Satellite Networks**
Frank Yeong-Sung Lin, Si-Yuan Zhang and Chiu-Han Hsiao
- **WiCell: Multipath-Enabled Application-Transparent Enhancement for Hybrid Wireless Network**
Shuo Jia, Songlin Chen, Fuliang Li, Jiaxing Shen and Xingwei Wang

Session 8: AI-Enabled Communications and Networks

Chair: Zhao Wang

- **Lightweight Semantic Segmentation Network for End-to-End Learning-based Communication**
Songchen Dai, Yunlong Yu, Zhao Wang, Chenguang Liu and Yulin Zhou
- **Autonomous Access Traffic Splitting via 5G Core: Balancing QoS and ROI with Multi-Objective Reinforcement Learning**
Thanh Son Pham, Phi Hung Nguyen, Quan Huan Vu, Duc Hai Nguyen and Cong Dan Pham
- **DRILL-Q: Delay-Responsive Intelligent Learning for Latency-sensitive QoS**
Hyerin Kim, Katerina Koutlia, Biljana Bojovic, Amir Ashtari and Gabriel Carvalho
- **NetPrompt: LLM-driven Programmable Network Policy Management and Optimization**
Kiran Neupane, Kevin Kostage, Sean Peppers, Ashish Pandey, Prasad Calyam and Chengyi Qu
- **NextG-GPT: Leveraging GenAI for Advancing Wireless Networks and Communication Research**
Ahmad Nazar, Mohamed Selim, Daji Qiao and Hongwei Zheng
- **DRL-Based UAV Trajectory and Bandwidth Optimization for Emergency Semantic Communication**
Jihuan Jin, Mianxiong Dong and Kaoru Ota

Session 9 (Invited 3): Emerging Technology and Wireless Communications/Network

Chair: Andreas Kassler

- **Random Access in IRS-assisted 802.11 Networks**
Jakob Rühlw, Joana Angjo, Sascha Rösler, Falko Dressler and Anatolij Zubow
- **A Glimpse of Emerging Networking and Distributed Computing Research via Experiments on the FABRIC Testbed**
Kuang-Ching Wang, Paul Ruth, James Griffioen, Anita Nikolich, Inder Monga, Zongming Fei, Yongwook Song, Mami Hayashida, Pinyi Shi, Komal Thareja, Tom Lehman, Ezra Kissel, Yatish Kumar, Xi Yang, Ilya Baldin, Benjamin Formby and Acheme Acheme
- **SLICES-RI Pre-Operation Methodology and Services**
Serge Fdida, Panayiotis Andreou, Nikos Makris, Damien Saucez, Sebastian Gallenmuller and Brecht Vermeulen
- **Efficient Entanglement Routing for Satellite-Aerial-Terrestrial Quantum Networks**
Yu Zhang, Yanmin Gong, Lei Fan, Yu Wang, Zhu Han and Yuanxiong Guo
- **Building Innovative Networks towards Beyond 5G**
Hiroaki Harai
- **Performance Evaluation of MQTT and ZeroMQ for V2X Communications over 5G Networks**
Naba R. Khatiwoda, Babu R. Dawadi, Shashidhar R. Joshi, Carlos T. Calafate and Pietro Manzoni
- **Direct Feature Access - Scaling Network Traffic Feature Collection to Terabit Speed**
Lukas Froschauer, Jonatan Langlet and Andreas Kassler

12:00 – 13:30 Lunch break

13:30-15:00

Panel II: Challenges and Opportunities of NTN networks deployments

Moderator: Dr. Maria Guta, Satellite Telecommunications Engineer, European Space Agency

Panelists:

- Luca Lodigiani, Aalyria Technologies, USA
- Masamitsu Tsukui, Rohde & Schwarz, Japan
- Dr. Klaus Michel, Airbus Defence and Space, Germany
- Muneaki Ogawa, SKY Perfect JSAT, Japan

15:00-15:30 Coffee break

15:30-17:30

Session 10: Security, Privacy, and Trust II

Chair: Yuan Zhang

- **Protection of Critical Emergency Response Infrastructures through Machine Learning**
Carlos Rosa Remedios, Jezabel Molina Gil and Pino Caballero Gil
- **Efficient Privacy-Preserving Network Path Validation**
Weizhao Jin, Erik Kline, T. K. Satish Kumar, Lincoln Thurlow and Srivatsan Ravi
- **Verifiable Weighted Electronic Voting against Tally Leakage for Popular Voting Methods**
Chenrui Zeng, Yuan Zhang, Yaqing Song, Xinyu He, Pengfei Liu, Yuanyuan He and Hongwei Li
- **Parallel Cuckoo Hashing: Accelerating Secure Encrypted Data Search in Cloud Environments**
Hongyang Lin, Jiabei Wang, Tiancheng Zhu, Yiwen Gao, Quan Yang and Yongbin Zhou

Session 11: Emerging Topics in Networking

Chair: Amir Ashtari Gargari

- **Explainable AI for Spectrum Sensing**
Varun Magotra, Sirani Mututhanthrige Perera, Arjuna Madanayake and Houbing Song
- **Multi-Objective Optimization for Energy-efficient Hovering in RIS-Assisted Multi-UAV ISAC Systems**
Jiachao Shen, Jieling Zhang, Congcong Liu, Pinlong Zhao, Pengfei Jiao, Zhidong Zhao and Huaming Wu
- **FedBand: Adaptive Federated Learning Under Strict Bandwidth Constraints**
Taghreed Alanazi, Abdulrahman Fahim, Muntaka Ibnath, Basak Guler, Amit Roy Chowdhury, Ananthram Swami, Evangelos E. Papalexakis and Srikanth V. Krishnamurthy
- **Perturbation-based Graph Active Learning for Semi-Supervised Belief Representation Learning**
Dachun Sun, Jinning Li, Xinyi Liu, You Lyu, Hongjue Zhao, Denizhan Kara and Tarek Abdelzaher

Session 12 (Invited 4): Security/Privacy and + CPS

Chair: Manimaran Govindarasu

- **Real-time Cybersecurity Situational Awareness Framework for Agriculture Machinery-based IoT Networks**
Souradeep Bhattacharya and Manimaran Govindarasu
- **Data-Free Backdoor Attack on Malware Image Classification Models**
Garvit Agarwal, Yousef Alomayri, Agnideven Sundar and Feng Li
- **Secure Computation for G-Module and its Applications**
Tianpei Lu, Qizhi Zhang, Bingsheng Zhang, Lichun Li, Shan Yin and Kui Ren
- **Correlated-Sequence Differential Privacy**
Yifan Luo, Meng Zhang, Jin Xu, Juntong Chen and Jianwei Huang
- **P3SL: Personalized Privacy-Preserving Split Learning on Heterogeneous Edge Devices**
Wei Fan, Jinyi Yoon, Xiaochang Li, Huajie Shao and Bo Ji
- **UNITY: Semi-supervised Meta-learning Load Monitoring for Resource-restricted Smart Grids**

Xiaoyu Wang, Hao Zhou and Yusheng Ji

- **LiquidAuth: Reliable and Accurate Liquid Authentication Using GAN-enhanced Acoustic-to-Mass-Spectrum Mapping**

Juncen Zhu, Huizi Han, Jiannong Cao, Julie Mccann, Ho Yin Michael Ma and Xiaoyun Liu

18:30-20:30

Conference Baquet

August 6 Wednesday

8:30-9:30

Keynote III: Revolutionizing Datacenter Networks via Reconfigurable Topologies

Speaker: Prof. Stefan Schmid, TU Berlin

Chair: Krishna Kant, Temple University

9:30-10:00 Coffee break

10:00-12:00

Session 13: Network Architecture, Algorithm, Protocol, and Evaluation II

Chair: Lisong Xu

- **Online Dual-Resolution 3D Map Caching Algorithm Using MILP as a Neural Network Proxy**
Chun-An Yang, Guo-Wei Huang, Kuan-Hsiang Lo, Shao-Lun Sun, Yu-Wen Chen, Jian-Jhih Kuo and Ming-Jer Tsai
- **Optimizing Availability Decomposition for Network Slicing using Bandit Algorithms**
Masaki Kobayashi, Akito Suzuki and Masahiro Kobayashi
- **Enabling Symbolic Execution for Hardware TCP/IP Stack based on AMD Vitis HLS**
Nianhang Hu, Tate Koziol, Witawas Srisa-An and Lisong Xu
- **WISTRO: Towards Efficient Weather-Aware Routing for Integrated Satellite-Terrestrial Networks**
Shu Yang, Dantong Chen, Laizhong Cui and Mingwei Xu
- **Graph-based Gossiping for Communication Efficiency in Decentralized Federated Learning**
Huong Nguyen, Tri Nguyen, Praveen Kumar Donta, Susanna Pirttikangas and Lauri Lovén
- **Optimal Allocation for Rank-Consistent Grouping Services**
Hsiang-Jen Hong, Ge-Ming Chiu, Shiow-Yang Wu, Bagus Jati Santoso, Tien-Ruey Hsiang and Tai-Lin Chin

Session 14: Pervasive Communications, Networking and Sensing

Chair: Pengfei Wu

- **SEGUS: A Semantic Element Gesture Understanding System via Symbol-Path Decoupling**
Tianyi Xu, Hao Zhou, Kaiwen Guo, Xiaoyan Wang and Zhi Liu
- **UAV-Enabled Dynamic Data Collection and Energy Replenishment in Large-Scale IoT Networks**
Pengfei Wu, Xinyu Liu, Hong Zhu, Haiping Huang and Chao Sha
- **CoVeRaP: Cooperative Vehicular Perception through mmWave FMCW Radars**
Jinyue Song, Hansol Ku, Jayneel Vora, Nelson Lee, Ahmad Kamari, Parth Pathak and Prasant Mohapatra
- **A 3-D Ray Inversion Method for Regional Channel Impulse Response Restoration**
Zeyang Zhang, Jialu Tan, Shuchen Wang, Yanjun Chen and Fei Qin
- **CoPlay: Audio-agnostic Cognitive Scaling for Acoustic Sensing**
Yin Li and Rajalakshmi Nandakumar

Session 15 (Invited 5): Cloud/Edge and Wireless Communications/Network

Chair: Aaron Striegel

- **KBL: Kettle-style Buffer Loading Algorithm for Short Videos**
Shangyue Zhu, Alamin Mohammed, Aaron Striegel, Theo Karagioules and Emir Halepovic
- **Design of Folded/Unfolded Clos Networks for Data Centers with Extended Stages Guaranteeing Admissible Blocking Probability**
Eiji Oki, Ryotaro Taniguchi, Kazuya Anazawa and Takeru Inoue
- **A Computing-Aware Framework for Dynamic Traffic Steering in the Edge-Cloud Computing Continuum**
Federica Perrone, Laura Lemmi, Carlo Puliafito, Antonio Virdis and Enzo Mingozzi
- **Cloud Is Closer Than It Appears: Revisiting the Tradeoffs of Distributed Real-Time Inference**
Pragya Sharma, Hang Qiu and Mani Srivastava
- **Multi-Timescale Hierarchical Prefetching for Online Caching in Vehicular Edge Networks**
Shuaibing Lu, Bojin Xiang, Jie Wu, Philipp Andelfinger and Wentong Cai
- **Towards a unified few-shot learning evaluation framework for RF fingerprinting**
Sai Shi, Vahid Mahzoon, Xuyu Wang, Shiwen Mao, Jie Wu and Slobodan Vucetic

12:00-13:30 Lunch break

13:30-15:00

Session 16: Edge and Cloud Computing II

Chair: Haiying Shen

- **Large Language Model Enhanced Multi-UAV Direct Cross-boundary Maritime Data Collection Scheme**
Yang Zhao, Hanjiang Luo, Hang Tao, Jinyin Li, Chao Liu and Jiehan Zhou
- **Revisiting the Straggling Problem in GPU-based Distributed Deep Learning Training**
Suraiya Tairin, Zeyu Zhang and Haiying Shen
- **Byzantine-robust Federated Learning**
Zheyuan Liu, Qian Guo, Yidan Hu, Aisha Aseeri, Depeng Li and Rui Zhang
- **Common DNN Layer Sharing aware Task Scheduling for Inference Acceleration in Serverless Edge Computing**
Yanfei Xu, Zhexiong Li, Deze Zeng and Lin Gu

Session 17: Security, Privacy, and Trust III

Chair: Huu Nghia Nguyen

- **How Can I Check Your Certificate Status in Dead Zones? A Secure Solution for Satellite Networks**
Yali Wang, Yuan Zhang, Jingwen Lu, Dairu Han, Ruijin Sun, Zhisheng Yin and Nan Cheng
- **Efficient Batch Opening Schemes for Merkle Tree Commitment with Applications to Trustless Cross-chain Bridge**
Bingsheng Zhang, Wuyunsiqin, Xun Zhang, Markulf Kohlweiss and Kui Ren
- **A DGA Detection Method Based on Spatiotemporal Features of DNS and NetFlow Traffic**
Yuan Feng, Jun Tao, Yifan Xu, Jiangtao Wang, Jiaqi Wei and Yu Fang
- **Strategizing for Cyber Security Enhancement Autonomous Intersection Management (AIM)**
Wesley Duclos, Jian Wang, Yongxin Liu and Huihui Wang
- **A Security Framework leveraging Programmable Data Planes for Detecting PTP Time-delay Atta**
Huu Nghia Nguyen, Edgardo Montes de Oca, Frank Durr, Jose Costa Requena and Marilet De Andrade

Session 18: [Short Paper] Network Architecture, Algorithm, Protocol, and Evaluation-S

Chair: Zhuo Li

- **Evaluations of High Power User Equipment (HPUE) in Urban Environment**
Kasidis Arunruangsirilert, Pasapong Wongprasert and Jiro Katto
- **Robust Determination of WiFi Throughput Tests Being Indicative of Broadband Bottlenecks**
Francis Gatsi, Muhammad Rochman, Monisha Ghosh and Aaron Striegel
- **Dynamic Node Scheduling for Delay Optimization in Federated Large Language Model Training**
Jingbo Dun and Zhuo Li
- **Achieving Adaptive Multi-Path Routing and Order-Preserving Time Slot Planning in TSN**
Yanke Li, Shuo Wang, Guoyu Peng, Guizhen Li, Siyu Han, Jiao Zhang, Yi Li and Tao Huang
- **MLRW: Minimal Link-usage Routing and Reusable Wavelength Assignment for Multiple Multicasts in Ring-based Optical Network-on-Chip**
Wen Yang
- **Consistency-Aware Multi-Server Network Design under Server Failures in Delay-Sensitive Applications**
Masaki Oda, Akio Kawabata and Eiji Oki
- **Modified Gamma and Hyper-Erlang Distribution Models for Group Broadcasting**
Yuqiang Wen and K. L. Eddie Law
- **SDN Controller Design for LEO Satellite Networks with Three-Phase Traffic Engineering**
Zibin Chen, Wuyang Zhang and Lixin Gao
- **Efficient Resource Allocation and Power Control for D2D Communication with RAN Sharing**
You-Chiun Wang and Wei-Ting Chen
- **Vigilante Defender: A Vaccination-based Defense Against Backdoor Attacks on 3D Point Clouds Using Particle Swarm Optimization**
Agnideven Palanisamy Sundar, Feng Li, Xukai Zou, Yucheng Xie and Ryan Hosler

15:00-15:30 Coffee break

15:30-18:00

Session 19: [Short Paper] Security, Privacy, and Trust-S

Chair: Chi Wan Sung

- **Enhancing Large Language Model with Repair Component for Automated Program Repair**
Chengyi Sun, Yuqing Zhang and Shangru Zhao
- **BRAIN: Blockchain-Based Remote Attestation Infrastructure for Heterogeneous Trusted Execution Environments**
Yiwei Chen, Xiaochuan Wang, Xiaoling Li, Liantao Song, Wenjun Sha and Yan Ding
- **Securing Traffic Sign Recognition Systems in Autonomous Vehicles**
Thushari Hapuarachchi, Long Dang and Kaiqi Xiong
- **Analog Zigzag-Decodable Codes for Secure and Numerically-Stable Distributed Computing**
Chi Wan Sung and Jiajun Chen
- **A Cooperative Statistical Approach for Abnormal Node Detection with Adversary Resistance**
Yingying Huangfu and Tian Bai
- **PQTLS-AD: Post-Quantum TLS Accelerated with DNS**
Sangwon Lim, Hyeonmin Lee, Gyeongheon Jeong and Taekyoung Kwon
- **Log-Based Anomaly Detection with Multi-level Progressive Temporal-Semantic Fusion**
Zhiyu Wen, Qian Zhang, Pei Zhang, Han Zhang, Yanxu Fu, Ming Zhao, Xiaohong Huang and Yan Ma
- **Robust Secure Beamforming for IRS-Aided ISAC via D2D Jamming**
Kai Chen, Jinlei Xu, Na Deng, Wei Wang, Nan Zhao and Xianbin Wang
- **An Advanced Hybrid Model for Network Traffic Classification**
Quoc-Viet Nguyen, Zih-Yu Wong, Khanh-Duy Nguyen, Min-Te Sun, Wu-Yuin Hwang, Kazuya Sakai and Wei-Shinn Ku

Session 20: [Short Paper] Edge and Cloud Computing & AI Networking-S

Chair: Lucas Bréhon-Grataloup

- **A Contextual Client Selection Method for Volatile Federated Learning**
Zizheng Wang, Zhaohua Zheng and Qiquan Chen
- **Exploiting Virtual Energy Storage to Improve Power Oversubscription in Colocation Data Centers**
Wenli Zheng and Xiaorui Wang
- **A Proactive Shredding Approach for Secure Deletion of Content in the Multi-Cloud Environment**
Ali Alqarni, Ellen Fei and Zongming Fei
- **A Multi-Leader Multi-Follower Game-Theoretic Approach for Delay-constrained Mining Task Offloading in MEC-assisted Blockchain Networks**
Xian Xiu, Licheng Ye, Lin Gao, Jingjing Luo, Tong Wang and Yufei Jiang
- **PASS: A Priority-based Model Assignment for Minimal Inference Time in Serverless Edge Cloud**
Fangshuai Zhu, Deze Zeng, Lin Gu, Yuepeng Li and Hongmin Geng
- **Integrated CPU-GPU Task Scheduling for Energy Efficiency and Low Latency in Heterogeneous Industrial IoT Systems**
Jiahui Zhai, Jing Bi, Haitao Yuan, Ziqi Wang, Jia Zhang and Rajkumar Buyya
- **Mercury: A Dynamic Multi-path Packet Spraying Scheme for RDMA Networks**
Yuxiang Wang, Jiao Zhang, Zirui Wan, Leixin Cai, Shuo Wang and Tao Huang
- **Predictive QoS for Tele-Operated Driving over 5G SA Networks: an Experimental Study**
Lucas Bréhon-Grataloup and Rahim Kacimi
- **Can LLMs only talk? Experimental Studies on Task Scheduling with Large Language Models**
Mengjuan Li, Zhengguang Chen, Huan Zhou, Zhipeng Wang, Yingwen Chen, Baokang Zhao, Xue Ouyang and Jinshu Su
- **AI-enabled Resource Allocation with PHY-Layer Twin for RIS-Aided Cell-Free Wireless Systems**
Gloria Mollah, Majumder Haider, Imtiaz Ahmed and Danda B. Rawat

Session 21: Poster

Chair: Francesco Tusa

- **Deep Reinforcement Learning for Video Quality in RIS-Enabled Mobile Edge Computing**
Shu-Ming Tseng and Jer-Wei Chang
- **DRL-Based Backup Power Scheduling for Resilient Smart Grid Recovery**
Vajiheh Farhadi and James Giffen
- **User-perceived QoE Improvement by Differentiated ECN based on Video Semantics**
Kosuke Kuruba, Kai Sakamoto, Yusaku Hayamizu, Masaki Bandai and Miki Yamamoto
- **Feasibility Study on Anomaly Detection in Multi-LiDAR Sensor Network**
Hikaru Sudo, Shunsuke Sato, Ryoichi Shinkuma and Gabriele Trovato
- **Preliminary Study on Adaptive Task and Resource Allocation for Digital Twin-Enabled Urban Services**
Takafumi Fu, Takumi Miyoshi and Taku Yamazaki
- **Privacy-Preserving FaaS: A Marketplace for the Serverless Edge-Cloud Continuum**
Francesco Tusa
- **Sensing Data Allocation in Blockchain-Enabled Dynamic Spectrum Sharing with Distributed Storage**
Tomoya Shinozuka, Takumi Miyoshi and Taku Yamazaki
- **Adaptive Data Transmission Management by Incorporating Sensing in mmWave V2V Communication**
Bo Wei, Hang Song and Jiro Katto
- **Detection and Mitigation of False Data Injection Attacks for MEC-based Leader-Follower CACC**
Yuki Ito, Naoya Sato, Yuma Katsuki, Anan Sawabe, Yusuke Shinohara and Ryogo Kubo
- **Detection and Size Estimation of Small Objects using Multi-LiDAR Sensor Network**
Haruma Shiraishi, Ryoichi Shinkuma and Gabriele Trovato
- **Face-direction Estimation System using Multi-LiDAR Sensor Network**
Ken Kameoka, Ryoichi Shinkuma and Gabriele Trovato

- **Blockchain Framework for Registering 3D Machine-Learning Models with Disclosed Training Datasets**
Kuon Akiyama, Yoshiki Tsuruta, Ryoichi Shinkuma and Aram Mine
- **Automated Classification System for Object Detection using Multi-LiDAR Sensor Network**
Tatsuya Kobayashi, Ryoichi Shinkuma and Gabriele Trovato

August 7 (Thursday)

8:30-10:00

Session 22: [Short Paper] IoT and Emerging Networks

Chair: Eyuphan Bulut

- **AIBLE: AI-powered BLE Localization System for Work Zone Safety Alerts**
Samuel Akinyede and Sejun Song
- **Distributed Energy-Aware Multi-Agent K-hop Proximal Policy Optimization for Mission-Oriented Drone Networks**
Ying Li, Nithun Selva and Ruihan Zhu
- **Edge-Enabled Resource Optimization for Smart Grids: A Load Balancing Approach**
Madhukrishna Priyadarsini
- **MockiFi: CSI Imitation using Context-Aware Conditional Neural Process for Zero-shot Learning**
Md Touhiduzzaman and Eyuphan Bulut

ICCCN 2025 Workshop Program Overview

August 7, 2025 (Thursday, Local times in Tokyo, Japan)			
8:00: Registration Open			
(Rooms)	Asakaze	Shunyo	Matsukaze
8:30-10:00		Session 23 (WK 1): SoftIoT + IoTPST + ISCC-IoT (3+1+1)	Session 24 (WK 2): BDSSN 1 (5)
10:00-10:30	Coffee Break		
10:30-12:00	Session 25 (WK 3): BDMLN (5)	Session 26 (WK 4): AIECN (Keynote) + Quantum (2)	Session 27 (WK 5): BDSSN 2 + SCIAN (4+1)
12:00-13:30	Lunch (on your own)		
13:30-14:30	Session 28 (WK 6): EAI-IoT (5)	Session 29 (WK 7): AIECN 2 (6)	Session 30 (WK 8): HRLLC in 6G 1 (5)
14:30-15:00	Coffee Break		
15:00-17:00	Session 31 (WK 9): VENITS + COHEREENT (4+3)	Session 32 (WK 10): AIECN 3 (7)	Session 33 (WK 11): HRLLC in 6G 2 + DISCS (5+2)

ICCCN 2025 Workshop Program

August 7 (Thursday)

8:30 - 10:00

Session 23 (WK1): SoftIoT + ISCC-IoT + IoTPST

Session Chair: Haotong Cao (Nanjing University of Posts and Telecommunications),

haotong.cao@njupt.edu.cn

- **LLM-Based V2X Multi-Model Sensor Data Fusion for Improved Road Safety and Data Privacy**
Chengpeng Guo (University of Bristol), Bintao Hu (Xi'an Jiaotong-Liverpool University), Junwei Zhang (Communication University of China), Zhengyu Wan (Shenzhen MSU-BIT University), Jianbo Du (Xi'an University of Posts and Telecommunications), Xiaolin Mou (Shenzhen Technology University)
- **CFcoQUIC: CPU/FPGA Co-design Accelerated QUIC for Low-Power IoT Communication**
Xin Dong, Lizhuang Tan, Huiling Shi, Wei Zhang (Shandong Computer Science Center), Peiying Zhang (University of Petroleum (East China))
- **Wheeled Robot SLAM in Degenerate Environments**
Min Xue (Xi'an Research Institute of Navigation Technology, China), Xiaoqiao Tian (Xi'an University of Posts and Telecommunications)
- **A multi-features fused AP Selection Strategy for Wide-range Indoor Localization System with Sparse Deployment**
Jiahong Xiao, Jianhong Chu, Zhi Zhang, Yuyao Wang (Beijing University of Posts and Telecommunications), Min Liang, Xingyu Zhang (Hanshow Technology Co.)
- **Smart Traps for Smart Systems: Scalable Honeynets for IIoT Cybersecurity**
Wael Alsabbagh, Diego Urrego (Brandenburg University of Technology Cottbus-Senftenberg, Germany), Peter Langendörfer (IHP – Leibniz-Institut für innovative Mikroelektronik, Germany)

Session 24 (WK2): BDSSN 1

Session Chair: Chair: Hanlin Zhang (Qingdao University), hanlin@qdu.edu.cn

- **MaEA: A Secure Aggregation Defense Method Against Poisoning Attacks in Federated Learning**
Yujie Xue, Zheyi Chen, Hailin Feng (Zhejiang A&F University), Hansong Xu (Shanghai Jiao Tong University), Kun Hua, Dongfeng Fang (California Polytechnic State University)
- **An STGNN Model Based Traffic Prediction for Complex Patterns**
Nuri Alperen Kose, Kubra Kose, Fan Liang (Sam Houston State University)
- **SMART: a practical and robust client-side RAP detection approach**
Tong Sun, Qian Lu, Hanlin Zhang, Qianqian Su, Xinrui Ge (Qingdao University)
- **Adaptive Selective Encryption for Surveillance Videos via Hierarchical Grading and YOLO Detection**
Hanlin Zhang (College of Computer Science and Technology, Qingdao University), Weihao Wang, Hequn Xian (Qingdao University)
- **DABE-PU: Decentralized Attribute-Based Data Sharing Scheme with Policy Update Privacy**
Fanhao Meng, Qianqian Su (Qingdao University)

10:30 - 12:00

Session 25 (WK3): BDMLN

Session Chair: Genya Ishigaki (San Jose State University), genya.ishigaki@sjsu.edu

- **MODL-CM: Metaheuristic-Optimized Deep Learning Frameworks for IoT-Based Condition Monitoring**
Akeem Kareem, Jang-Wook Hur (Kumoh National Institute of Technology, Gumi)
- **Taming Imbalance and Complexity in WAN Traffic Engineering**
Yufeng Xin, Sajith Sasidharam, Cong Wang, Mert Cevik (University of North Carolina at Chapel Hill)
- **Performance Comparison of HTTP/3 and HTTP/2 with Proxy Integration**
Fan Liu, Behrooz Farkiani, John Dehart, Jyoti Parwatikar, Patrick Crowley (Washington University in St. Louis)
- **An Approximate Solution Using Graph Convolutional Network for a Load Balancing Problem in Communication Networks**
Shota Osada, Norihiko Shinomiya (Soka University)

Session 26 (WK 4): ICCCN Workshop AIECN Keynote + Quantum

Session Chair: Bintao Hu (Xi'an Jiaotong-Liverpool University), Bintao.Hu@xjtlu.edu.cn

- **ICCCN AIECN Workshop Keynote: Discussion on Intelligent Optimization Methods for Sensing, Communications, and Computing Integrated Wireless Networks**
Jianbo Du, Xi'an University of posts and Telecommunications
- **Quantum Feature Optimization for Enhanced Clustering of Blockchain Transaction Data**
Yun-Cheng Tsai (National Taiwan Normal University), Samuel Yen-Chi Chen (Wells Fargo)
- **Energy Efficient Quantum Entanglement Generation Optimizing Resource Utilization in Large Network**
Vineet Dwivedi, Chandrashekar Jatoth, Vivek Sukla (National Institute of Technology, Raipur), Rajkumar Buyya (The University of Melbourne)

Session 27 (WK5): BDSSN 2 + SCAIN

Session Chair: Hansong Xu (Shanghai Jiao Tong University), hansongxu@sjtu.edu.cn

- **Breaking Android with AI: A Deep Dive into LLM-Powered Exploitation**
Wanni Vidulige Ishan Perera, Xing Liu, Fan Liang (Sam Houston State University), Junyi Wang (Lawrence Technological University)
- **Blockchain-Based Network-Aware Task Offloading in Intelligent Transportation**
Fan Liang (Sam Houston State University)
- **A Gaussian Temporal Based Graph Convolutional Network for Traffic Operation Flow Forecasting**
Jiahao Zhang, Shulan Guo, Hequn Xian (Qingdao University), Shangda Xiao (Manual School Qingdao), Zesheng Cheng (College of Computer Science and Technology, Qingdao University), Mingxuan He (Dalian University of Technology)
- **Proactive Task Migration with Server Grouping for Co-Resident Mitigation in AI Computing Clusters**
Xiangbin Wang, Qiang Wu, Meng Yuan (Nanjing University of Aeronautics and Astronautics)

13:30 - 14:30

Session 28 (WK6): Edge-AI

Session Chair: Shuhui Yang (Purdue University Northwest), Shuhuiyang@pnw.edu

- **Enabling Federated Learning for Object Detection in Connected Autonomous Driving Using YOLO with the Flower Framework**
Komala Subramanyam Cherukuri, Kewei Sha, Junhua Ding (University of North Texas)
- **Bayesian Deep Neural Network-empowered Thompson Sampling for Context-aware Task Offloading in Dynamic Fog Computing**
Tran-Dang Hoa, Dong-Seong Kim (Kumoh National Institute of Technology)
- **Resource Trading for Vehicular Edge Computing Networks: A Trust-Based Double Auction Approach**
Weiwei Yang, Xiaoyi Zeng, Jinkai Zheng, Yanfeng Zhang, Kaihui Liu (Dongguan University of Technology), Xiaoyan Li (Jilin University), Kangle Mu (Northwestern University)

- **FaaS and Furious: Accelerating Privacy-Preserving ML with Function as a Service at the Edge**
Francesco Tusa (University of Westminster and University College London), Antonis Michalas (Tampere University), James Bowden (Universitätsmedizin Göttingen), Tamas Kiss (University of Westminster)

Session 29 (WK7): AIECN 2

Session Chair: Bintao Hu (Xi'an Jiaotong-Liverpool University), Bintao.Hu@xjtlu.edu.cn

- **Misalignment Discussion of an Eight-Coil Wireless Power Transfer System**
Yuanpu Zheng, Hanxiao Su, Shuangyao Huang, Guangyu Ren, Wenzhang Zhang (Xi'an Jiaotong-Liverpool University), Chen Xu (Vivo Mobile Communication Co. Ltd.)
- **Low-Altitude Economy-Oriented Multi-Layer UAV NOMA Caching Networks: Deployment and Resource Optimization**
Qing Ren, Hui Wang (Huaxin Consulting CO., Ltd),
Yue Yin (Keio University)
- **Resource Coordination Learning for End-to-End Network Slicing Under Limited State Visibility**
Xiang Liu, Genya Ishigaki, (San Jose State University), Jason P. Jue (The University of Texas at Dallas)
- **Improving Image Transmission with VAE-based Semantic Communication Using HQAM**
Carlos Guerra Yáñez, Stanislav Zvánovec (Czech Technical University in Prague), Antonio Mederos Barrera (University of Las Palmas de Gran Canaria), Zabih Ghassemlooy (Northumbria University)
- **Topo-X: Co-optimize Flow Scheduling, Topology, and ML Training Parallelism**
Yi-Xiang Hu, Han Tian, Yifang Zhao, Feng Wu, Xiang-Yang Li (University of Science and Technology of China)

Session 30 (WK 8): HRLLC in 6G 1

Session Chair: Fanqin Zhou, Beijing University of Posts and Telecommunications, yangzx@bupt.edu.cn

- **An Equivalent Channel-based Hybrid Precoding Scheme for Multi-user Massive MIMO Systems**
Shiguo Wang, Jun Zhang, Yun Zhao (Changsha University of Science and Technology), Xiukai Ruan (Wenzhou University)
- **Joint Time Slot Access and Transmit Beamforming for Multi-User Symbiotic Radio System on the PSR**
Yujie Qiu, Zhixiang Yang, Jing Gao (Beijing University of Posts and Telecommunications)
- **Joint Optimization for Semantic-Aware Communication and Control: A GDM-Empowered DRL Approach**
Lijie Zhou, Shiyi Gu, Yu Zhou, Wenjing Li (Beijing University of Posts and Telecommunications), Zheng Dong, Haoyang Bai, Jiakai Hao (State Grid Beijing Electric Power Company, Beijing)
- **Leveraging Generative Diffusion Models for Enhanced Beam Alignment in Cell-Free MIMO Systems**
Jinli Zhang, Yikun Zhao (Beijing University of Posts and Telecommunications)
- **HAtt3EGNN: An Unsupervised Power Allocation Method for Cell-Free Massive MIMO**
Tenghan Guo, Kunyi Xie, Wenjing Li (Beijing University of Posts and Telecommunications)

15:00 - 17:00

Session 31 (WK9): VENITS + COHEREENT

Session Chair: Francesco Tusa (University of Westminster and University College London), f.tusa@westminster.ac.uk & Francisco J. Martinez (University of Zaragoza), f.martinez@unizar.es

- **Learning Based Rate Adapter for UAV Streaming**
Nassim Sehad, Riku Jäntti (Aalto University), Jashanjot Singh Sidhu, Abdelhak Bentaleb (Concordia University), Hamed Hellaoui (Nokia), Mèroneue Debbah (Khalifa University)
- **Load Balancing in Connected Vehicle Services.**
Akira Ito, Toru Furusawa, Lei Zhong (TOYOTA MOTOR CORPORATION), Takuro Sakai, Tatsuki Agatsuma (KDDI CORPORATION)
- **Enhancing Vehicular Charging Systems with a Natural Language HMI Solution**
Pablo Donate, Julio A. Sanguesa, Piedad Garrido, Vicente Torres-Sanz (Universidad de Zaragoza)
- **LoRaWAN for ITS: Overcoming Connectivity Challenges in Remote Areas**
Pablo Donate, Julio A. Sanguesa, Piedad Garrido (University of Zaragoza)

- **SFIOC: a Platform to Support Service Dependency Injection in Serverless Functions**
Andrea Sabbioni, Luca Foschini (University of Bologna)
- **A DRL-Based Scheduler for FaaS in Smart Grids: Balancing URLLC Reliability & mMTC Connectivity**
Vajiheh Farhadi (Bucknell University)
- **Edge Serverless Autoscaling managed via Proximal Policy Optimization**
Mauro Femminella, Gianluca Reali (University of Perugia - DI)

Session 32 (WK 10): AIECN 3

Session Chair: Yuan Gao (Shanghai University), gaovuansie@shu.edu.cn

- **Voice-Activated Control System for Drone-Mounted PTZ Cameras**
Xuehan Chen, Wenzhang Zhang, Guangyu Ren, Shanshan Zhao (Xi'an Jiaotong-Liverpool University)
- **A Blockchain-Enhanced Deep Learning Platform for Secure Semantic Alignment and Sharing of Chemical-Biological Data**
Sida Huang, Jialuoyi Tan, Jingxuan Liu, Zhiran Wang, Wenzhang Zhang, Yuji Dong (Xi'an Jiaotong-Liverpool University), Xie He (Nanyang Technological University)
- **HAFE: Hierarchical Attention-based Frontier Exploration for Multi-Robot Mapping**
Xueyan Yao, Yuji Dong, Matilda Isaac (Xi'an Jiaotong-Liverpool University)
- **Diffusion Model-aided Resource Scheduling for Multiple GAI Training Jobs**
Meng Yuan, Qiang Wu, Xiangbin Wang, Siyang Sun (Nanjing University of Aeronautics and Astronautics)
- **An Incentivization Strategy toward E2E Network Slice as a Service**
Yosha Mundhra, Riti Gour, Genya Ishigaki (San Jose State University)
- **Link-level Blocking Prediction for Dynamic Network Slicing using Graph Neural Networks**
Manmohanbabu Rupanagudi, Genya Ishigaki (San Jose State University)
- **Blockchain-Enabled Personalized Travel Recommendations with Semantic Search and Transparent Data**
Yihan Huang, Jingxuan Liu, Sida Huang, Jialuoyi Tan (Xi'an Jiaotong-Liverpool University), Xie He (Nanyang Technological University), Shuangyao Huang, Yuji Dong (Xi'an Jiaotong-Liverpool University)

Session 33 (WK 11): HRLLC in 6G 2

Session Chair: Zhixiang Yang, Beijing University of Posts & Telecommunications, fqzhou2012@bupt.edu.cn

- **Analysis of Time Synchronization for 6G-TSN Networks with Hot Standby**
Mahin Ahmed, Raheeb Muzaffar, Damir Hamidovic, Armin Hadziaganovic, Hans-Peter Bernhard (Silicon Austria Labs GmbH), Lucas Haug (University of Stuttgart), Hans-Peter Bernhard (Silicon Austria Labs GmbH and Johannes Kepler University), Marilet De Andrade (Ericsson Research), Janos Farkas (Ericsson Research)
- **GDM enhanced CNN-based first arrival path delay estimation framework.**
Jiale Quan, Xudong Wang, Tianhang Sun, Wenjing Li (Beijing University of Posts and Telecommunications)
- **Dynamic Cell Association for Hierarchical Over-the-air Federated Learning with Non-IID Data**
Zerui Zhen, Fanqin Zhou, Xuesong Qiu (Beijing University of Posts and Telecommunications), Sheng Hong (Beihang University)
- **Distributed Robust Control Mechanisms for Power Wireless Network Control Systems**
Huanpeng Hou, Xiaoyong Qi, Jing Zong, Ming Li (State Grid Henan Information & Telecommunication Co., Ltd), Tianle Lin, Shiyi Gu, Fanqin Zhou (Beijing University of Posts and Telecommunications)
- **Cross-Layer Latency Compression and Spectrum Compaction Framework for Event-Triggered Traffic in HRLLC Industrial Network**
Kang Li, Jiaying Fang, Yan Wang, Pengcheng Zhu (National Mobile Communications Research Laboratory, Southeast University)
- **Cell-Expansion and Region-Cut-Split Algorithms for Steiner Tree Problem in HAPS Networks**
Yuqiang Wen, K. L. Eddie Law (Macao Polytechnic University)
- **The Impact of GEO Satellite Latency on Twitch Live Streams**
Ziv Weissman, Jiamo Liu, Elizabeth Belding (University of California, Santa Barbara)

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