# Call for papers AI-Enabled Communications and Networks (AICN) Symposium

### FCN 2025

Belgrade, Serbia, on August 18-22, 2025 http://www.future-forum.org.cn/en/fcn2025/index.html

## **Co-Chairs**

Song Guo, The Hong Kong University of Science and Technology, China (<u>songguo@cse.ust.hk</u>) Hacene Fouchal, Université de Reims Champagne-Ardenne, France (<u>hacene.fouchal@univ-reims.fr</u>) Fabrizio Granelli, University of Trento, Italy (<u>fabrizio.granelli@unitn.it</u>) Rongpeng Li, Zhejiang University, China (<u>lirongpeng@zju.edu.cn</u>)

# Scope

Artificial Intelligence and Machine learning have shown significant potential in facilitating human-centered cognitive systems. With AI and ML, communication and networking systems can become cognizant, implementing agile reconfiguration and optimization processes based on measured data. The AI and Machine Learning for Communications and Networking symposium focuses on topics related to all aspects of machine learning applied to communication and networking systems, and seeks original unpublished papers focusing on theoretical analysis, algorithm/protocol design, novel system architectures, experimental studies, emerging applications, standardizations, testbeds, etc. The goal is to bring together and disseminate the latest developments and technical solutions concerning all facets of the broad area of AI and ML for communication and networking systems, including emerging intelligent and/or self-aware communications and networking systems intelligent, autonomous, efficient, and trustworthy. The symposium calls for original, previously unpublished papers on the topics including, but not limited to, the following:

- AI and ML for communication and network operation and control
- AI and ML for communication and network resource optimization
- AI and ML for cognitive communication and networks architecture
- AI and ML for communication and network security management
- AI and ML for self-aware network management
- AI and ML for the Internet of Things
- AI and ML for cyber-physical systems
- Machine intelligence-enabled communication and network big data analytics
- Machine intelligence-enabled cloud/edge/fog computing for communication and networking systems
- · Machine intelligence-driven communication network theory and algorithms
- AI and ML for RF signal processing
- AI and ML for collaborative spectrum sharing
- AI and ML for distributed communications and sensing
- AI and ML for next-generation cognitive networks
- AI and ML for next-generation wireless networks such as 5G networks
- AI and ML for new network architectures such as software-defined networking and network function virtualization
- AI and ML for constrained networks such as sensor networks, tactical networks, etc.
- AI and ML for supporting ultra-low latency and highly reliable communications

## **Submission Guidelines**

Perspective authors should follow the instructions at <u>http://www.future-forum.org.cn/en/fcn2025/Kit.html</u> to prepare their manuscripts. All papers should be submitted via EDAS. Submission information can be found at <u>http://www.future-forum.org.cn/en/fcn2025/Submission.html</u>.

# **Short Biographies of Co-Chairs**

#### Song Guo

Dr. Song Guo is a Chair Professor in the Department of Computer Science and Engineering at the Hong Kong University of Science and Technology. His research interests are mainly in edge AI, cloud computing, machine learning, and distributed systems. As a Clarivate Highly Cited Researcher, he published many papers and received over a dozen Best Paper Awards in top venues with wide impact in these areas. He is the recipient of Edward J. McCluskey Technical Achievement Award (IEEE Computer Society) in 2024, First Prize in Natural Science (China Electronics Society) in 2023, Gold Medal in 2023 Geneva Inventions Expo, etc. Prof. Guo is a world-renowned leader who made fundamental and pioneering contributions to the development of novel edge intelligence architectures, algorithms, and systems over ubiquitous mobile, IoT, and wearable devices. His work on edge AI has created significant impact from generation of new scientific knowledge to creation of innovative technologies, as featured widely in prominent public media. He is a Fellow of the Canadian Academy of Engineering (FCAE), Member of Academia Europaea (MAE), and Fellow of the IEEE (FIEEE).

### **Hacene Fouchal**

Dr. Hacène Fouchal obtained a habilitation degree in Computer Science from Université de Reims Champagne-Ardenne (URCA) in 2001 and a PhD from Université de Paris 7 in 1995 and M.S. in Computer Science, from Université de Paris Sud (Orsay) in 1989. Currently he is a full Professor at URCA. His research interests cover Cooperative Intelligent Transport Systems(C-ITS), Internet of Things, Vehicular Networks and Cyber-security. He is the head of the Lab-I\*-Computer Science Laboratory- since January 2024. He has served as a chair of the IEEE "Software Communications" Technical Committee from 2018 to 2020. He was Editor/guest editor for 13 journals, he has published more than 100 papers in peer reviewed journals and international conferences. He has supervised more than 20 defended PhD thesis. He was Involved in many European research projects on C-ITS: SCOOP(2014-2019); INTERCOR(2017-2020); C-ROADS(2017-2020); Indid(2019-2023), SCALE(2024-2028)- All funded by the European Commission.

#### Fabrizio Granelli

Dr. Fabrizio Granelli is Full Professor at the Dept. of Information Engineering and Computer Science (DISI) of the University of Trento (Italy). He received the «Laurea» (M.Sc.) and Ph.D. degree from the University of Genoa, Italy, in 1997 and 2001, respectively. He was visiting professor at the State University of Campinas (Brasil) and at the University of Tokyo (Japan). He was IEEE ComSoc Distinguished Lecturer for the period 2012-15 and 2021-23 (4 terms), ComSoc Director for Online Content in 2016-17, Delegate for Education at DISI in 2015-2017, IEEE ComSoc Director for Educational Services (2018-19) and IEEE ComSoc Director for Conference Development (2022-23). Prof. Granelli was General Chair or TPC Chair of several prestigious IEEE conferences, such as IEEE Globecom, IEEE NFV-SDN, IEEE CAMAD, and chaired several symposia at IEEE ICC and Globecom. He is Founding Chair of the Aerial Communication Emerging Technology Initiative of IEEE Communications Society and Chair of the IEEE P1954 Standard Working Group. He is author or co-author of more than 300 papers published in international journals, books and conferences. He was Associate Editor in Chief of IEEE Communications Surveys and Tutorials (2017-2022), and Senior Editor of the IEEE Transactions on Green Communications and Networking.

#### **Rongpeng Li**

Dr. Rongpeng Li is currently an Associate Professor with the College of Information Science and Electronic Engineering, Zhejiang University. From August 2015 to September 2016, he was a Research Engineer with the Wireless Communi- cation Laboratory, Huawei Technologies Company Ltd., Shanghai, China. He was a Visiting Scholar with the Department of Computer Science and Technology, University of Cambridge, Cambridge, U.K., from February 2020 to August 2020. He has published more than 100 papers in peer reviewed journals and international conferences. His current research interests include networked intelligence with communications efficiency. Dr. Li received the Wu Wenjun Artificial Intelligence Excellent Youth Award from Chinese Association for Artificial Intelligence. He serves as an Editor of China Communications.