

Call for Papers

Big Data Networking Symposium

The 17th International Wireless Communications & Mobile Computing Conference

IWCMC 2021 Website: <http://iwcmc.org/2021>

SUBMISSION LINK: <https://edas.info/newPaper.php?c=27588>

Harbin, China

June 28 - July 2, 2021

Technically sponsored by IEEE, IEEE Spain Society

Symposium Chairs:

Yiming Miao, The Chinese University of Hong Kong, (Shenzhen), China, yimingmiao@ieee.org

Yin Zhang, Univ. of Electronic Science and Technology of China, China, yin.zhang.cn@ieee.org

Min Chen, Huazhong University of Science and Technology, China, minchen@ieee.org

Scope:

Driven by the sixth generation (6G) communication system, the 5G communication system's large-connection, high-bandwidth and low-latency scenarios are developing in the direction of all day long information service under the integration of satellite networks. With the continuous evolution of storage, computing, networking and communication infrastructures with their extensive deployments, 6G network will promote the seamless connection of Cyber-Physical world and human society, that is, the deep integration of physical space, information space and human society. However, with the development of artificial intelligence (AI) chips, intelligent big data driven networking systems are becoming more and more extensive. A massive number of evergrowing smart devices impose new challenges to big data sensing, transmitting, processing and management. And the bottlenecks of conventional networking and communication systems from different scales, ranging from wireless local area networks to macro-cellular networks, have been exposed, such as increased complexity with large scale networks, dynamic topology in mobile networking, resource constraints in computing and networking, heterogeneous architectures, impracticality of centralized, weak survivability, and unattended resolution of potential failures. Thus, there is a need to fundamentally address all the above-mentioned issues in big data networking domains. We need to investigate novel contributions in the field of machine learning and big data analytics applied to networking. Based on AI, edge computing and Internet of things, we need to realize the deep integration of big data, intelligent algorithms and networking, including frameworks capable of collecting and analyzing both online and offline massive datasets and scalable analytic techniques. As one of the technical symposia of the 2021 International Wireless Communication and Mobile Computing Conference (IWCMC 2021), Big Data Networking Symposium seeks cross disciplinary innovative research ideas and applications results from academia and industry for big data networking issues including novel theory, algorithms, protocols, architectures and applications.

Accepted papers will be published in the IEEE IWCMC 2021 proceedings and will be submitted to the IEEE digital library (IEEE Xplore).

Topics of interest include, but are not limited to:

- Energy-efficient caching, computation and communication fusion for big data networking
- Measurements and practical experiences from prototypes and testbeds for big data management
- Quality of service issues on heterogeneous communications and 6G networking
- Architectures, protocols and algorithms of ubiquitous Internet of Things for big data collections
- Trust, security, privacy and appropriate cryptographic protocols for cloud, edge, IoT and big data systems
- Data-driven networking for emerging medical applications
- Applications, operating systems, and middleware supports for big data analytics, big data visualization, big data curation and management
- Cross-layer design and optimization methods for emerging big data networking architectures
- Big data standards, and big data performance modeling and analyses

- Intelligence from big data and big data-driven self-organized networking systems
- Scientific discovery from big data security, privacy, and legal issues specific to big data
- Graph processing and machine learning over distributed networking systems
- Machine learning, data mining and big data analytics in networking system
- Transfer learning and reinforcement learning for networking system

Submission Guidelines:

Prospective authors are invited to submit original technical papers—up to 6 pages of length, using the EDAS link: <https://edas.info/newPaper.php?c=27588> for possible publication in the IWCMC 2021 Conference Proceedings, which will be submitted to the IEEE Xplore. Selected papers will further be considered for possible publication in three special issues in the following Journals. For more information, visit: <http://iwcmc.org/2021/>

- Wiley Journal of Wireless Communications & Mobile Computing (WCMC)
- The International Journal of Sensor Networks (IJSNet)
- International Journal of Autonomous and Adaptive Communications Systems
- KSII Transactions on Internet and Information Systems
- Peer-to-Peer Networking & Applications
- Sensors

Note: There will be best paper award, best Symposium award and best Workshop award.

Important Dates:

Submission:	10 Jan. 2021
Acceptance notification:	30 Mar. 2021
Registration/Camera-ready:	30 Apr. 2021

TPC Members: TBD

- Zhengguo Sheng, University of Sussex, UK
- Yujun Ma, University of British Columbia, Canada
- Daxin Tian, Beihang University, China
- Jianming Hu, Tsinghua University, China
- Humar Iztok, University of Ljubljana, Slovenia
- Honggang Qi, University of Chinese Academy of Sciences, China
- Evangelos I. Kaiser, Florida Atlantic University, USA
- Tao Luo, Beijing University of Posts and Telecommunications, China
- Carlos Palau, Technical Univ of Valencia, Spain
- Jian Wang, Jilin University, China
- Yin Zhang, Zhongnan University of Economics and Law, China
- Jeungeun Song, Huazhong University of Science and Technology, China
- Lianyu Chu, UC Irvine, USA
- Kai Lin, Dalian University of Science and Technology, China
- Jiang Liu, Beijing Jiaotong University, China
- Xin Sun, Ocean University of China, China
- Giancarlo Fortino, University of Calabria, Italy
- Honggang Wang, University of Massachusetts Dartmouth, USA
- Pietro Manzoni, Technical Univ of Valencia, Spain