

Call for Papers

Big Data Networking Symposium

*The 16th International Conference on Wireless Communications and Mobile Computing
IWCMC 2020*

IWCMC 2020 Website: <http://iwcmc.org/2020/>

Submission Link: <https://edas.info/newPaper.php?c=26206>

Limassol, Cyprus

June 15 — 19, 2020

Technically sponsored by: IEEE and IEEE Lebanon Section

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Scope:

With the continuous evolution of storage, computing, networking and communication infrastructures with their extensive deployments, the last few years have witnessed a booming interest in the big data driven networking systems. However, 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, 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. On the other hand, machine learning represents a different paradigm to tackle these challenges. Its data-driven nature allows it to automatically learn the complexity of the communications and networking environment and dynamically adjust protocols without human interactions. Thus, we need to investigate novel contributions in the field of machine learning and big data analytics applied to networking, including scalable analytic techniques and frameworks capable of collecting and analyzing both online and offline massive datasets. As one of the technical symposia of the 2020 International Wireless Communication and Mobile Computing Conference (IWCMC 2020), 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 2020 proceedings and will be submitted to the IEEE digital library (IEEE Xplore).

Topics of interest include, but are not limited to:

- Energy-efficient transport, network, and MAC protocols for big data networking

- Measurements and practical experiences from prototypes and testbeds for big data management
- Quality of service issues on heterogeneous communications and 5G networking
- Architectures, protocols and algorithms of ubiquitous sensor networks for big data collections
- Trust, security, privacy and appropriate cryptographic protocols for cloud, IoT and big data systems
- Cloud-assisted wireless body area networks 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

Important Dates

Submission:	January 10, 2020
Acceptance notification:	March 30, 2020
Camera-ready paper submissions:	April 30, 2020

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=26206> for possible publication in the IWCMC 2020 Conference Proceedings, which will be submitted to the IEEE Xplore. Selected papers will further considered for possible publication in three special issues in the following Journals. For more information, visit: <http://iwcmc.org/2020/>

1. The International Journal of Sensor Networks (IJSNet)
<http://www.inderscience.com/browse/index.php?journalCODE=ijsnet>
2. The International Journal of Autonomous and Adaptive Communications Systems (IJAACS)
<http://www.inderscience.com/jhome.php?jcode=ijaacs>
3. KSII Transactions on Internet and Information Systems: <http://www.itiis.org/>
4. Peer-to-Peer Networking & Applications:
<http://www.springer.com/engineering/signals/journal/12083>
5. Cyber-Physical Systems journal: www.tandfonline.com/loi/tcyb20

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

TPC Members:

- Jeungeun Song, University of British Columbia, Canada
- Yong Li, Tsinghua University, China
- Chin-Feng Lai, National Chung Cheng University, Taiwan
- Daxin Tian, Beihang University, China
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