

Call for Papers

Internet of Things (IoT) 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

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Technically sponsored by: IEEE and IEEE Lebanon Section

Organizing Committee

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Scope

Machine-to-machine (M2M) communication has emerged as a new communication paradigm that allows machines to directly communicate with each other with little or no human intervention. M2M communications has inspired a wide variety of Internet of Things (IoT) applications, including smart metering, healthcare monitoring, fleet management and tracking, remote security sensing, and industrial automation. Nevertheless, the existing wireless technologies are designed and optimized mainly for human-to-human (H2H) communications. Comparing to H2H networks, M2M networks face the following unique challenges:

- a much larger amount of devices need to be supported in an M2M network than an H2H network;
- traffic patterns of M2M devices are significantly different from those of H2H devices;
- many different types of M2M devices with different characteristics and requirements may co-exist;
- the resource management scheme should be redesigned to consider the low-mobility property of M2M devices;
- power-saving mechanisms should be employed to reduce the power consumption of low-power M2M devices;
- With the increasing number of connected machines, hackers and cyber criminals have more attacking points in IoT, and security and privacy for IoT should be well protected.

As M2M communications bring very different requirements, wireless technologies should themselves evolve and establish capabilities to address these challenges.

The objective of this Symposium is to bring together state-of-the-art contributions on the modeling, designing, implementation, deployment, and management of M2M systems, architectures and protocols, and IoT applications.

Topics

Accepted papers will be published in the IEEE IWCMC 2020 proceedings and will be submitted to the IEEE digital library (IEEE Xplore). Authors are welcome to submit papers with topics that include, but are not limited to:

- IoT Application Protocols
- Network architecture and system design in IoT
- Addressing and naming in IoT
- Programming models for the IoT
- IoT and Edge Computing
- IoT Applications, Services and Test-beds
- IoT Data Management
- IoT Anomaly Detection
- Identity Management towards Internet of Things (IoT) on Machine Type Communications (MTC)
- Emerging Technologies for M2M (RFID, Sensing, Actuating, etc.)
- IoT enabled smart grid architectures and models
- Communication networks for smart grids and smart metering
- Advanced Metering Infrastructure (AMI) communication and management
- Sensor, actuator, and machine-to-machine (M2M) networks for smart grid
- Support for storage, renewable or green energy resources, and micro-grids
- Demand side management, demand response, and dynamic pricing for smart grid
- Smart grid cyber security
- Emerging applications, services, and management models of smart grid
- Reliability, availability, resiliency, and robustness of smart grid
- Simulation and performance analysis of smart grid communications and operations.
- Energy-Efficient M2M
- Web Technologies for IoT
- M2M System and Functional Architecture
- M2M Access Network Technologies and Optimization
- M2M Address Management and End-to-End Addressability
- M2M Gateway Technologies
- M2M MAC Protocols
- M2M Network Management
- M2M Network Protocols
- M2M Performance Management (QoS, Scalability, Reliability, etc)
- M2M Security and Privacy
- M2M Session and Mobility Management
- M2M Standardization Activities
- M2M Transport Protocols

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 (TBD)