

International Conference on Computers and Management (ICCM 2018)

G B Pant Govt. Engineering College Okhla Phase-III New Delhi- 110020

22-23 December, 2018

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Paper Submission Deadline: October 11, 2018

Paper submission Link: <https://easychair.org/conferences/?conf=iccm20180>

The authors are requested to include the session name during paper submission

Conference Website: <http://www.iccm2018.iaasse.org/>

Call for Papers

Special Session: Emerging Technologies of IOT for a Digital Nation

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Details of proposed session

Introduction:

Internet of Things (IOT) has been considered as an important technological revolution for developing a smart city which will lead to building a digital nation. It has been predicted in recent studies that more than seventy percent of world population will live in urban areas though presently fifty percent already lives there. To improve the quality of life, measures should be taken by the urban stakeholders for sustainability and facilities provided to the people living there. The market place for IOT is expected to grow rapidly due to significant increase in the number of smart devices, M2M connections, and smart wearable's. It has a wide range of application areas including e-Healthcare, smart grids, smart home, connected car and industrial automation using cheap, fast, low power and intelligent signal processing algorithms. Hence it is crucial to design resource efficient, reliable and secured wireless communication technologies by considering various constraints imposed by heterogeneous IOT systems.

The Internet of Things (IOT) has stepped out of its infancy and is at the verge of becoming the next major extension for fruitful management of unstructured/semi-structured data generated by resource-constrained infrastructural devices. In this context, the recent trend is to utilize the emerging cloud computing platform to support IoT systems due to its enormous storage and processing capabilities. However, this convergence of IOT and cloud computing requires the need of designing efficient wireless communication technologies, and various aspects such as latency, energy

efficiency, computational efficiency, system reliability and security is another area which need to be investigated.

Scope:

The aim of this special session is to address the challenges and focus on recent research activities in the areas of efficient, reliable, and secured wireless communication technologies for IOT systems, low-complexity data acquisition and signal processing techniques, and cloud-based solutions for proficient management of heterogeneous IOT networks. In this direction, we invite researchers from academia, industries and governmental organizations to submit their novel works on system architectures, theoretical models, system-level simulations/experimental results, and hardware demonstration results in the related areas.

In the light of the above, the main purpose of this Special Session is threefold:

- To obtain a coherent and concise synthesis from the abundance of recently emerged material in the area of IOT technologies and architectures.
- To promote unprecedented approaches in analysing, designing and optimizing smart city scenarios through the use of IOT technologies and architectures, and
- To identify open issues which remain as a challenge towards using IOT technologies in smart city markets.

Topics:

The main topics of interest include, but not limited to the following:

- IoT system design methodologies
- IoT Protocols and standards
- Hardware prototype design for IoT applications
- Signal processing and practices for embedded IoT devices
- Big data processing in IoT systems
- Energy efficiency and green networking
- Real-time experimentation test-beds making use of IOT technologies over a smart city scenario
- Communication challenges and solutions for the applications of IoT
- Edge computing (EC) for smart sensors
- Security enhancement and privacy preservation techniques
- Cloud-assisted solutions for resource management in IoT systems
- Compressed sensing, deep learning, and sparse reconstruction for IoT
- Machine Learning for IoT applications
- Distributed information processing in IoT
- Emerging application areas using innovative technologies