Welcome Messages

Message from the Chairs

The 2016 IEEE 3rd World Forum on Internet of Things is the premier IEEE Forum for research institutes, academia and industry to share their acquired knowledge on technologies, applications, and economic and social implications of the internet of things. Our 2016 theme has been **IoT: Smart Innovation for Vibrant Ecosystems**, focusing on the vision of a highly-networked future, where every object is enabled to interact with one another, allowing for communications between devices (Things-to-Things), as well as between humans and objects. This integration enables intelligent systems to improve our daily lives and creates new, innovative ecosystems. This conference is designed to examine key critical innovations that will impact research and the real-world applications of the future as well as transform our world for the better.

This conference is a unique event for industry leaders, academics, professionals, government officials and students, and is structured to foster knowledge dissemination and promote networking, career development, and entrepreneurship in these specific technological and application areas.

Emerging technologies, business cases and social impacts in this technological area will be analyzed and discussed with various activities:

6 extraordinary keynote speakers:

- Vint Cerf, Google
- Trung Tran, DARPA
- Taher Elgamal, Salesforce
- Geoff Mulligan, LoRa Alliance
- Paul Mockapetris, Threatstop
- Pindar Wong, Vefifi Ltd

136 technical papers, selected from 289 submissions, aggregated into 21 technical track sessions including:

- IoT Enabling Technologies
- IoT Application and Services
- IoT Societal Impacts
- IoT Experimental Results
- IoT Security and Privacy
- Big Data and IoT Data Analytics
- Intelligent Transport
- Smart Cities, Smart Public Places, Smart Home/Building Automation

8 industry forum sessions covering:

- IPv6-based IoT Deployment Around the World
- IPv6 IoT InterOp-Ware
- The Challenges in Automating, Controlling and Regulating Complex Systems Using IoT Technologies: Machines, Robots, Buildings, Factories, Vehicles and More
- IoT Security & Privacy
- IoT and Low Power Wide Area Networks (LPWAN)
- Best Practices in Industrial IoT Cybersecurity
- IoT: A Great Opportunity for Emerging Economies?
- IoT Governance in the USA - Policy Challenges & Issues

Workshops and special sessions on hot and emerging topics:

- Workshop on IoT as Driver for the Co-Created Smart City
- Workshop on MARTCPS Models at Runtime & Networked Control for Cyber Physical Systems
- Workshop on Ubiquitous Sensing and Actuation (UbSA) via the Internet of Things
• Workshop on User-Centric Security, Privacy and Interoperability in the Context of Internet of Things and Smart Cities
• Special Session on Social Internet of Things (SIoT)
• Special Session on Signal Processing for Internet of Things
• Special Session on Mobile Edge Computing for Consumer Internet of Things and Emerging Technologies for Software Defined Internet of Things
• Special Session on Military Applications of IoT

5 tutorials covering:

• Intelligence At the EDGE: Using Mobile Edge Computing to Deliver Consumer Centric IoT Services
• CDSA and BSON: The Two Key Enablers of Lean, Elastic and Proactive Wireless Networks Needed for Future IoT
• Development of IoT-based Applications for Smart Cities
• Compressive Sensing - A Game-Changing Technology for Energy-Efficient IoT Sensor Networks
• Five Years of Research and Innovation Experience in IoT: Lessons Learnt DOs and DON'Ts

The Second IEEE Winter Academy on Internet of Things, in cooperation with the IEEE and the Università degli Studi di Milano, offering a comprehensive package of tutorials, selected keynotes, and industry sessions

Networking sessions

Best Paper Awards

Organizing such a reputable, large conference has been a complex and enormous task. Efforts from many people from around the world were required to shape the technical program, prepare the proceedings, arrange the venue and accommodations, manage numerous administrative aspects, and set up the social functions. We would like to take this opportunity to thank each and every one of the contributors in the conference organization.

We would also like to thank the public and private organizations that are supporting this meeting in different ways. First of all, we are truly indebted to the IEEE, which is sponsoring the conference through the following Societies and Technical Councils: IEEE Communications Society; IEEE Computer Society; IEEE Consumer Electronics Society; IEEE Reliability Society; IEEE Sensors Council; IEEE Signal Processing Society; IEEE Society on Social Implications of Technology; IEEE Council on Electric Design Automation; and IEEE Vehicular Technology Society. Furthermore we are very grateful to the patrons, Darkmatter, Machine Q of Comcast, LoRa Alliance and the Nigerian Regulator NCC, which have provided a unique financial contribution to support the various initiatives of the conference for the benefit of the whole community.

We would like also to thank the keynote speakers, the tutorial lecturers, the panelists, the authors, and all attendees: your vibrant participation, your sharing of expertise and experiences, and your active personal networking are what will make this event memorable. Together we can plant the seed of knowledge and innovation which will bloom and grow in the years to come for the benefit of the economy, the society and the daily life of everyone.

We wish and hope that you will enjoy this diverse agenda and meet new IoT fellows, while networking with some of the keen experts collectively driving the IoT roadmap in the right direction. And we wish that you will enjoy Reston, Washington D.C. and the surrounding areas, in order to have a comprehensive experience that embraces technology and innovation as well as develops new friendships from around the world.

Sincerely,

The 2016 WF-IOT Organizing Committee

2016 IEEE 3rd World Forum on Internet of Things (WF-IoT) took place 12-14 December 2016 in Reston, VA, USA.

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