Proposal for Special Session on

"Blockchain Technologies for Internet of Things (IoT)"

Chaired and Organized by

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Theme of the Special Session

There has been a lot of noise about the Internet of Things nowadays. It's immense effect on nearly everything that we do can't be overlooked, it is reshaping the cyberworld by connecting everything to the internet. From industry to smart industry, from hospital to smart hospital, from cities to smart cities are few applications of IoT. The IoT framework is complex and heterogenous that bring a number of challenges such as decentralization, poor interoperability, privacy and security vulnerabilities susceptible to attacks.
The blockchain has emerged as the solution for IoT security due to its numerous advantages such as distributed data storage and immutability. It offers the potential for improving the overall security of the IoT ecosystem. The International Data Corporation predicts that about 20% of all IoT deployments will have some sort of Blockchain services enabled in near future. There is a strong reason to believe that blockchain will lead to the establishment of a new generation of IoT ecosystem.

This special track will provide a forum for researchers and industrialists to share recent research results on the convergence of Blockchain and IoT, ranging from overviews, proof-of-concepts case studies, to applications.

Topics include, but not limited to:

- Blockchain in IoT device authentication, authorization and access control
- Blockchain in IoT data and system security
- Blockchain in IoT supply chain management
- Blockchain in M2M communications
- Blockchain platforms for IoT development
- Blockchain implementation in IoT embedded systems
- Novel Blockchain microprocessors and microcontrollers
- Blockchain in smart home applications
- Blockchain in smart building applications

- Blockchain in smart city applications
- Blockchain in smart healthcare applications
- Blockchain in smart transport applications
- Blockchain in smart manufacturing system applications
- Blockchain in smart agriculture system applications
- Blockchain in smart oil industry applications
- Testing, simulation and performance analysis is blockchain
- Blockchain applications in IoT: case studies
- Blockchain and IoT tools for teaching and learning