AIMS AND SCOPE

The Communications and Network (CNS) Track discusses Communications and Networks as they are the nerve system of Information Technology, and a dominating part of our daily lives. Cloud Computing, Web 2.0 Social Networks, Internet of Things (IoT), Network Data Analytics, Big Data, Mobile Devices, Smart Phones, and other network-based technologies are seeing explosive growth of services to all user domains; public or private, military or government, educational or industry, healthcare or finance, science or entertainment. Quality of Service, Security, Interoperability, speedy access, and many other important requirements need to be studied, monitored, and predicted by methodologies such as simulation; a proven technique that can save costs, time, and/or lives. Additionally, papers describing design principles as well as applications pertinent (but not limited) to the following topics are also welcome:

Cloud Computing

- Cloud Performance
- Cloud Interoperability
- Hybrid & Enterprise Cloud Architecture
- Virtualization & Data Centers
- Simulation on the Cloud
- Simulation tools for Cloud Computing
- Clusters and Grid Computing & Communications
- Distributed Simulation and Real Time Systems

Big Data & Social Networks

- Data Science and Web Social Data Analytics
- Information Retrieval and Search Engines
- Massive Data Mining and Knowledge Discovery in Web
- Social Networks Simulation
- Web-Based Simulation and Applications
- Information Management and Simulation
- Network Security
- Cyberspace Security
- Network Security
- Cloud Security
- Security of Mobile Devices
- Network Security and Management
- Network Design and Performance Analysis

Internet of Things (IoT)

- IoT Network and Architecture
- IoT in Army and Manufacturing
- IoT Smart Homes, Smart Cities and Environment
- IoT Data & Analytics
- IoT Security, Energy and more
Neural Networks, AI and Healthcare related Networks
• Neural Networks, Learning and AI related Networks
• Biological Computing
• Wireless Sensor Networks in Healthcare
• Electronic Healthcare Records
• Military Healthcare System & Infrastructure
• Public Healthcare System & Infrastructure

Wireless Network & Mobile Network
• Cellular and Ad Hoc Network Simulation
• Wireless Communications and Networks
• Mobile Application
• Signaling and Routing Protocols
• Smart Phone Application

Other Network related Application and Simulation
• Traffic Engineering and Measurements
• High Level Architecture Simulation and Application
• Network application in Artificial Intelligence and Robotics
• Virtual Environments and Virtual Classrooms
• Peer-to-Peer Communications and Computations
• Large Scale Networks simulation
• Simulation Tools for Education and e-learning Networks
• Modeling Techniques, Verification and Validation
• Internet and Mobile QoS Architectures