

**Special Session for Qshine 2015 (<http://qshine.org/2015/show/home>)**  
**Call for Papers**

**Title**

Sensor Networks and Cloud Computing

**Description**

Sensor networks and cloud computing (SNCC) have received tremendous attentions from both academia and industry, as they are emerging to own numerous exciting applications in Internet of Things, Machine to Machine and Cyber Physical Systems (e.g., industrial process control, video surveillance, structural health monitoring, mobile commerce, mobile learning, mobile gaming), which can fundamentally change the way people interact with the physical world. Recently, integrating sensor networks with cloud computing is widely recognized to further enhance the performance of sensor networks or cloud computing applications, by utilizing the powerful cloud to store, process and share the data gathered by a variety of sensors. However, new research challenges need to be addressed in order to accelerate the development of these SNCC integrated applications. For instance, the mobile network bandwidth is still quite limited with the dramatically increasing mobile and cloud users. Intelligent resource management is required to provide users with services in an on-demand and scalable fashion. A secure mobile computing model is necessary to protect user privacy and data secrecy.

In this special session, we solicit research papers with respect to all aspects of SNCC. The goal of this special session is to bring together state-of-the-art research contributions, tutorials, and position papers that address various aspects of analysis, design, optimization, implementation, and application of SNCC.

**Topics of interest include, but are not limited to:**

- Protocols for supporting real-time and reliable sensor data streaming
- Energy-efficient sensor data gathering, transmission, traffic management, and sensor data management
- Scalability, mobility issues in cross-layer design, and optimization for effective sensor data communications
- Capacity modeling, performance analysis, and theoretical analysis in sensor networks
- Cooperative transmission for multimedia delivery, and collaborative in-network processing in sensor networks
- Joint multimedia processing and communication solutions in sensor networks
- Low-bit rate and energy-efficient multimedia source coding in sensor networks
- Topology control and synchronization protocols in sensor networks
- In-network and distributed storage techniques in sensor networks
- Energy-efficient transmission protocols and scheduling algorithms in sensor networks
- Energy harvesting in sensor networks
- Mobile-aware cloud computing models, infrastructures, and approaches
- Mobility modeling, management solutions and measurement techniques in cloud computing
- Mobile-aware cloud databases, data retrievals
- Intelligent resource management, provision, and migration for cloud
- Monitoring solutions and evaluation techniques for cloud
- Security and privacy issues, solutions, and tools for cloud
- Collaboration, management, and administration of cloud
- Cloud data center and storage technology
- Cloud-based mobile applications and systems

- Distributed, edge and fog computing
- Middleware for enabling sensors to join the cloud
- Sensing data aggregation and processing over the cloud
- Sensing data dependability over the cloud
- Secure sensing data over the cloud
- Quality of service of sensor cloud based services
- Architecture of sensor cloud
- Self-configuring, self-healing of sensors interacting with cloud
- Sensing as a service
- Novel sensor-cloud systems and applications

### **Important Dates**

Submission Deadline: 15 May 2015

Acceptance Notification: 01 June 2015

Camera Ready: 10 June 2015

Conference Date: August 19 – 20, 2015

### **Paper Submission**

- All submissions should follow the guidelines at <http://qshine.org/2015/show/initial-submission>
- For this special session submission, **please choose “Sensor Networks and Cloud Computing” track** when uploading the manuscript.
- Questions about submitting manuscripts or special session related issues can be sent to Kun Wang (kwang@njupt.edu.cn) or Zhengguo Sheng (z.sheng@sussex.ac.uk) or Chunsheng Zhu (cszhu@ece.ubc.ca)

### **Paper Publication**

- All accepted and presented papers in the conference will be published in the proceedings of the conference and submitted to the IEEE Xplore Digital Library. The proceedings are submitted for inclusion to the leading indexing services: DBLP, Google Scholar, Thomson Scientific ISI Proceedings, **EI Elsevier Engineering Index**, CrossRef, Scopus, as well as ICST's own EU Digital Library (EUDL).
- Selected papers, particularly those nominated for the Best Paper competition, will be automatically considered for publication in the EAI Endorsed Transactions on Mobile Communications and Applications and in the special issues of:
  - **Mobile Information Systems (MIS), SCIE-indexed**
  - **Springer Mobile Networks and Applications Journal (MONET), SCIE-indexed**
  - **Journal of Internet Technology (JIT) , SCIE-indexed**
  - **Journal of Computers (JoC) EI-indexed**