The Workshop

Smart cities use a variety of innovative ICT solutions to deal with real-life urban challenges. Some of these challenges include environmental sustainability, socioeconomic innovation, participatory governance, better public services, planning, and collaborative decision-making. In addition to creating a sustainable and futuristic smart infrastructure, overcoming these challenges can empower the citizens in terms of having a personal stake in the well-being and betterment of their civic life. Consequently, city administrations can get new information and knowledge that is hidden in large-scale data to provide better urban governance and management by applying these ICT solutions. Such ICT-enabled solutions can thus enable efficient transport planning, better water management, improved waste management, new energy efficiency strategies, new constructions, and structural methods for health of buildings and effective environment and risk management policies for the citizens. Moreover, other important aspects of the urban life such as public security, air quality and pollution, public health, urban sprawl, and bio-diversity loss can also benefit from these ICT solutions.

In general, ICT is becoming increasingly pervasive to urban environments and providing the necessary basis for sustainability and resilience of the smart future cities. ICT as the prime enabler for smart cities transforms application specific data into useful information and knowledge. From the ICT perspective, the possibility of realisation of smart cities is being enabled by smarter hardware (smart phones, sensor nets, smart household appliances, etc.), which can organise in an 'Internet of Things' (IoT) and thus become a major source of ever-increasing user and environment specific data. Use of cloud computing can be considered as a common platform as a service for managing cross-departmental city data and providing necessary computation power to generate required integrated information intelligence for decision making and policy development.

ICT tools for a smart city often deal with different application domains such as land use, transport, energy, and rarely provide an integrated information perspective to deal with sustainability and socioeconomic growth of the city. Smart cities can benefit from such data (often open data) and information using Big, and often real-time cross-thematic, data collection, processing, integration, and sharing through inter-operable services deployed in a Cloud environment. However, such information utilisation requires appropriate software tools, services, and technologies to collect, store, analyse, and visualise large amounts of data from the city environment, citizens, and various departments and agencies at city scale to generate new knowledge and support decision making.

In the above context, the real value of smart city data is gained by new knowledge generation and by performing context-based data processing and analytics using various data mining, machine learning, or statistical methods. This becomes challenging when applied to large-scale or real-time data and hence requires appropriate tools and techniques to be applied in a Cloud environment to process and generate required information. In addition, privacy and security issues must be dealt with to avoid sharing intrusive details of participants. This workshop invites original research papers providing insights into smart cities' needs, processes, and frameworks using Cloud-based software technologies and applications.
Key topics: Topics of interest include (but are not limited to):

- Smart Mobility and Clouds
- Smart Energy Grids and Clouds
- Smart Homes and Clouds
- Smart Cities and Internet of Things
- Smart and Intelligent Urban Data Analytics
- Context Aware systems for Smart Cities
- Smart Cities Big data management
- Smart Cities Data Analytics
- Data Harmonisation, Integration and Processing
- Smart Urban Governance and Clouds
- Cloud based Software Technologies for Smart Cities
- Environmental modelling, applications and Clouds
- Smart cities cross-thematic applications
- Public participation and crowd sourcing using Clouds
- Smart buildings, BIM and Clouds
- Connected Living Labs and Clouds
- Crowd Sourcing using Clouds for Participatory City Governance
- Smart data security and privacy aspects

Submissions that offer position statements, experiences, theoretical and industrial perspectives, lessons learned, comparisons, evaluations and technical contributions to smart future cities and clouds are also welcome.

Who should participate?
This workshop will be suitable for academics, researchers, practitioners and other stakeholders who are engaged in business of smart cities i.e. either providing ICT services or smart solutions or city administrations who are interested in innovative ICT solutions to enable them to transform their internal administrative processes, manage urban environment and lifecycle of big data collected from cities and use it intelligently for urban governance and decision making.

Paper submission guidelines
All papers must be submitted electronically and in PDF format via EasyChair. The material presented should be original and not published or under submission elsewhere. Authors should submit full papers of up to 6 pages, following strictly the IEEE Computer Society Proceedings Manuscript style, using two-column, single-space format, with 10-point font size. Figures and references must be included in the 6 pages. All papers will go through peer-review process and accepted papers will be included in the conference proceedings. At least one of the authors of each accepted paper must register early to attend the conference and workshop, in order for the paper to appear in the conference proceedings. Submitted papers must represent original unpublished research that is not currently under review for any other conference or journal. The proceedings will be published and will be made online through the IEEE Digital Library/Xplore.