Editorial
Smart City

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City is taking a key role in humanity development. With the continuous expansion of urban populations nowadays, there are increasing needs in many aspects related to urban living, such as environment governance, public safety, city planning, industry facilitation, resource utilization, energy conservation, traffic control, telemedicine, homecare, interpersonal communications, social activities, and entertainments. Failure in addressing any of the above needs may threaten the sustainable development of a city.

Smart city may be the solution, which generally relies on the widely distributed smart devices to monitor the urban environment in real-time, to react in time, to establish automated control, to collect information for intelligent decision making, and to facilitate various services and improve the quality of urban living. The distributed network of intelligent sensor nodes, as well as the data centers/clouds where the sensor data are stored and shared, constructs the main body of smart city infrastructure. Participatory sensing plays an indispensable role in the emerging initiatives of smart city, which retrieves sensor data from groups of people or communities and makes those data collectively form knowledge. The proliferation of personal mobile devices and development of online social networks make participatory sensing viable at large scale but induce many open problems at the same time.

Research on smart city related computing and networking issues has attracted wide attention and numerous efforts to spawn annual academic conferences and workshops, such as ACM MobiSys, ACM SenSys, and IEEE PerCom. This special issue appears to be one of the representative venues to focus on smart city technologies and so help to illustrate the latest contributions the community is making.

In response to the call for papers, we received 53 submissions from all over the world. All papers underwent a rigorous peer-review process. We finally selected 27 papers for this special issue. All the accepted papers have been revised for one or two rounds before being published.

The published papers of this special issue cover a wide variety of problems in smart city, from infrastructure to application level, focusing on both theoretical and practical aspects. For example, in the paper titled "*Building an intelligent laboratory environment via a cyber-physical system,*" the authors present a cyber-physical system (CPS) framework for a smart/intelligent laboratory environment, which is able to dynamically and automatically interpret and regulate environmental conditions. The proposed CPS can measure, analyze, and regulate the thermal comfort, so as to improve the performance of human activities in the laboratories.

In the paper titled "*Tracer: taming anomalous events with CRFID tags for trajectory management,*" the authors address trajectory management in logistics and supply chain systems. They propose to adopt the computational radio frequency identification (CRFID) tags to taming abnormal behavior in transportation and have implemented a preliminary deployment for airline baggage processing.

In the paper titled "*A case study of sensor data collection and analysis in smart city: provenance in smart food supply chain,*" authors discuss the monitoring, analysis, and management of food industry with Internet of Things and

present algorithms for tracing contamination source and back tracking potential infected food in the markets.

For energy management, the paper titled "*SMArc: a proposal for a smart, semantic middleware architecture focused on smart city energy management*" discusses in smart grid how to process the collected data and use them to insulate applications from the complexity of the metering facilities and guarantee that any change at the lower levels will be updated for future actions in the system.

In the paper titled "*Target tracking with NLOS detection and mitigation in wireless sensor networks,*" the authors propose approaches to identify the nonline-of-sight radio propagation paths for indoor localization. A routing algorithm for DTN networks is proposed in the paper titled "*The DTN routing algorithm based on Markov meeting time span prediction model.*" A reliable graph routing algorithm is proposed in "*Reliable graph routing in industrial wireless sensor networks.*" B. Bhana et al. study the data collection problems in the paper titled "*Using participatory crowdsourcing in South Africa to create a safer living environment,*" and Z. Feng et al. present a distributed compressive sensing method in the paper titled "*Distributed compressed sensing MRI using volume array coil.*"

It should be mentioned that this special issue just presents a small collection of latest works in the field of smart city. Its coverage is by no means complete despite our best efforts.

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