Foreword to 3M4City Workshop

Leonidas Anthopoulos
Department of Business Administration,
TEI of Thessaly, 41110 Larissa,
Greece
+302410684570
lanthopo@teilar.gr

Athena Vakali
Informatics Department
Aristotle University
54124 Thessaloniki, Greece
+302310888415
avakali@csd.auth.gr

ABSTRACT

In this foreword, the Modeling, Mining, Managing Smart City Data Flows (3M4City 2014) is presented and its contributions are outlined. The workshop has been held as the part of the 4th international conference on Web Intelligence, Mining, and Semantics (WIMS'14).

Categories and Subject Descriptors

J.1. [Computer Applications]: Administrative Data Processing – Government, I.2.4. [Artificial Intelligence]: Knowledge Representation Formalisms and Methods – Semantic networks, I.7.5. [Document and Text Processing]: Document Capture – Document Analysis.

General Terms

Languages, Management, Standardization, Experimentation.

Keywords

Smart City, Data Management, Data Modeling, Visualization, Smart People, Smart Government.

Smart city has proved to be a booming and challenging phenomenon, which reflects various urban aspects: the "smartness footprint" of a city, which concerns the measurement of various indexes with regard to the intelligence of its people, economy, government, mobility and living in general; information and communication technology (ICT) based solutions in the urban space, which are documented as alternative adjectives to city (i.e., digital, wireless, broadband, eco etc.); living labs and large-scale testing beds; and information flows across the city etc.

"3M4city: Modelling, Mining, Managing smart city data flows" workshop's main objective was to promote smart city research results in the context of Modelling, Mining, Managing data flows. More specifically, it aimed to illustrate the theoretical context, the existing state and current issues and trends,

accompanied by innovative and forthcoming developments (norms, policies, and standards) in smart city domain, mainly with regard to other city data flows (such as social networks, open data, etc), which add value and beneficial impact to the smart city domain. Theoretical concepts and modelling, empirical evidence and selected case studies in the field showing the "big picture" of smart cities were examined in this workshop.

These aspects were addressed by the contributors to this workshop who investigated smart city and data flows. The first article "Smart Cities Data Streams Integration: experimenting with Internet of Things and social data flows" by Vakali, Anthopoulos and Krco, questions whether sensor-based data in smart cities meet social media discussions and illustrate their findings from the Smart Santander (Spain) case, the SEN2SEC the EADIC research projects. They identified the importance of social media data crowling in smart city cases and illustrate potential products that can be utilized by the industry. Consoli et al. follow up and utilize the case of Catania (Italy) in order to depict how Linked Open Data (LOD) can be connected to existing GIS-based data in their article "Geolinked Open Data for the Municipality of Catania". Riga and Karatzas recognize the challenge regarding the capitalization of large volumes of data and collective intelligence, so as to detect what people think or discuss in virtual communities, in their work "Investigating the Relationship between Social Media Content and Real-time Observations for Urban Air Quality and Public Health". Cohen, Money and Quick with their contribution "Improving integration and insight in smart cities with policy and trust", propose that that trusted smart city policies can lead to the development of trusted foundational service underlying all corresponding solutions. The final article "Social Data Mining and Knowledge Flows Between Government and its Citizenry in Crisis and Normal Situations" by Riel, Popescu and Guanlao discussed how social data mining draw on real-time public opinion sentiments in democratic societies and illustrate what citizens know and want to know in normal circumstances.