Call for Papers
1st Workshop on Smart cities & Smart mobility towards improving quality of life & Well-being (SoCIaL) - Part of PETRA'17 Conference (www.petrae.org)
June 21-23, Rhodes, Greece

Important dates:
Paper submission deadline: March 3 2017
Acceptance notification: March 17, 2017
Camera-ready submission: March 31, 2017

Abstract: With the increase of urbanization and the rise of the "smart cities", it is time to exploit existing technologies and more importantly develop new paradigms to improve the quality of life and the well-being, whilst reducing the environmental impact. Scientific and technological advances in the areas of data science, Internet of Things (IoT), and data management, along with the release of unique, yet complex, data and information sources trigger unprecedented opportunities for innovation within the areas of smart cities and smart mobility. The continuously rising data volume and complexity constitute big challenges that research and business entities are facing today. Major drivers for the increasing complexity of data are the instrumentation of our environment and everyday life in a truly massive scale using fixed installations and mobile devices and the emergence of powerful technologies that allow inexpensive data collection and storage.

At the same time, new technological solutions shall allow us to recognize and use the hidden resources and data flows of urban environments for informed decision-making (by city manages, businesses or citizens). This includes using new sources of data and technology to acquire a thorough understanding of the environmental impact of urban growth and main vulnerabilities associated to different city zones for developing a more environmentally sustainable environment and reducing carbon footprint. What to minimize? Why? Where? And how? Thanks to the Internet and other mobile technologies citizens can today engage in collecting and analyzing data; hence, contributing actively in the co-production of smart city services and transportation.

The main focus of this workshop includes providing answers to the following key challenges: (1) How can we build an environmentally sustainable ecosystem whilst providing seamless experience in smart mobility? (2) How can data science, IoT, and data management technologies be exploited for innovative solutions within the areas of smart cities and smart mobility? (3) How can ICTs enhance citizen engagement and influence decision makers when launching smart city initiatives?

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

- Self-Driving Cars / Connected Cars: new mobility concepts for autonomous driving as the smart car systems
- Intelligent Transport Systems
- Multi-Modal, Integrated, and intelligent networks
- Smart transportation using data science and IoT

- Low Carbon Economy through Smart transport
- Crowdsourcing, Opinion mining, and eParticipation
- Methods and Techniques for assessing and improving Well-being and quality of life in future smart cities
- Machine Learning and data mining methods for smart cities and smart mobility
- Open data and their exploitation towards building smart cities and smart mobility
- Drones: methods and techniques for data collection, processing, and analytics
- Visual Analytics: novel interactive visualization and modeling techniques for smart cities
- Environmental technology: reducing carbon footprint and increasing sustainability for urban transport through ICT
- Multi-source data for public decision making
- Wearables: methods and techniques for exploiting wearable devices towards improving citizen well being
- Social media: data collection, management, storage, and processing techniques
- Personalized mobility services: how user data, sensors, IoT, and networks enable context aware mobility platforms
- Apps, Sensors, and portals for smart cities and mobility
- Optimization of the infrastructure of complex urban environments for smart mobility

Goals and expected results:
This workshop aims to attract an interdisciplinary group of researchers who are involved in research related to smart cities and data science, focusing on novel methods and technologies for building environmentally sustainable ecosystems, providing seamless experience in smart mobility, enhancing citizen engagement, and influencing decision makers when launching smart city initiatives.

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