



# ASD: Big data & Applications

12<sup>th</sup> ASD 2018

12th edition of the Conference on Advances of  
Decisional Systems

– Adam Park Hotel & Spa Marrakech

2-3 May 2018

## Track 2 : *Intelligent Transportation Systems: Big Data, Machine Learning & Cloud Computing*



### Call For Papers

#### Co-Chairs

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#### Objective

Modern transport systems and infrastructures are increasingly equipped with intelligent sensors and digital devices that communicate via Internet (Internet of Things). They are able to collect and exchange a huge amount of data according to the state of infrastructure, traffic conditions, demand, but also on heterogeneous human and social phenomena that can be useful for observation and improvement of transport systems. Indeed, we are witnessing a digital revolution in transportation systems, the most visible effect of which is the availability of large quantities of useful and heterogeneous data, which change with a very high rate (the 5V big data: volume, velocity, Value, veracity and variety). At the same time, transportation systems are faced with the critical challenges of urbanization, sustainability, security and mobility (e.g. managing increasing demand, reducing pollutant emissions, resilience to natural alea, Human and technological, etc.). Therefore, it is essential to apply new and improved analytical techniques to transform data from intelligent and communicating

systems and sensors into useful information to support decision-making, improve the performance of transportation process and provide new and more intelligent services, better adapted to the needs of citizens, operators and the administration of public transportation systems.

The 12th ASD 2018 conference also includes a special session "Big Data Analytics and Cloud Computing in Intelligent Transport Systems", organized jointly by the Moroccan association IOSIS (Innovative Open Spatial Information Systems) of the Faculty of Science and Technology of Mohammedia - Hassan II University of Casablanca, and the IFSTTAR (French Institute of Transport, Development and Network Science and Technology); You are invited to participate in this special session that focuses specifically on applying the Big Data Analytics and Cloud Computing paradigm to intelligent transportation systems.

This special session aims to present research related to the management of very large volumes of data coming from sensors (NFCs, radars, cameras, smartphones, gps, connected objects, etc.). The manipulation of these large data requires new methods and software solutions. In addition, the availability of these data offers new opportunities to provide a new generation of more efficient transport systems. Computing distributed through cloud computing has great potential to deal effectively with this data. The objective of

this session is to explore the possibilities of collecting and sharing important transportation data and consolidating the progress of appropriate analytical methods. The session covers all related topics, including but not limited to:

- Cloud/Edge/Fog computing for ITS
- Big data and data mining for ITS,
- Social Networks Analysis in Transportation,
- Intelligent Sensors, IoT (Internet of Things) and IoV (Internet of Vehicles),
- IoT Architectures for ITS,
- IoT Services in ITS,
- Technological focus for Smart Environments,
- Next Generation Networks,
- Smart City Examples and Case Studies,
- Data Analysis and Visualization for Smart City, Green Systems and Transport Systems,
- Architecture for secure and interactive IoT,
- Intelligent Infrastructure and Guidance Systems,
- Traffic Theory, Modeling and Simulation,
- ...

**The conference will take place in Marrakech 2,3 May 2018. Papers can be submitted in French or in English and submitted on [online conference management system](#) in PDF format**

A selection of articles will be proposed for publication in several partner scientific journals (see the conference website for more information).

## Dates

Submission of abstracts: February 5 , 2018  
Paper submission: February 20, 2018  
Notification of acceptance: March 20, 2018  
Camera-ready papers: March 30, 2018  
Conference: May 2-3, 2018

## Program Committee

- Nour-Eddin El Faouzi, LICIT, COSYS/IFSTTAR, France
- Angelo Furno, LICIT, ENTPE, France
- Latifa Oukhellou, GRETTIA, COSYS/IFSTTAR, France
- Romain Billot, Lab-STICC, Département LUSSI, IMT Atlantique Bretagne-Pays de la Loire
- Razvan Stanica, CITI Lab, INSA Lyon, INRIA, Lyon, France
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- Abdelfattah Idri, Hassan II University of Casablanca, Morocco
- Adil El Bouziri, Hassan II University of Casablanca, Morocco
- Azedine Boulmakoul, Hassan II University of Casablanca, Morocco
- Lamia Karim, Hassan I University, Morocco
- Roberto Sacile, Università degli Studi di Genova, Genoa.
- Haitam M. Laarabi, (Italian National Research Council (CNR), Italy