

# SMART 2014

## Foreword

The Third International Conference on Smart Systems, Devices and Technologies (SMART 2014), held between July 20-24, 2014, in Paris, France, continues a series of events covering tendencies towards future smart cities, specialized technologies and devices, environmental sensing, energy optimization, pollution control and socio-cultural aspects.

Digital societies take rapid developments toward smart environments. More and more social services are digitally available to citizens. The concept of 'smart cities' including all devices, services, technologies and applications associated with the concept sees a large adoption. Ubiquity and mobility added new dimensions to smart environments. Adoption of smartphones and digital finder maps, and increasing budgets for technical support of services to citizens settled a new behavioral paradigm of city inhabitants.

We take here the opportunity to warmly thank all the members of the SMART 2014 Technical Program Committee, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to SMART 2014. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the SMART 2014 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that SMART 2014 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of smart systems, devices and technologies.

We are convinced that the participants found the event useful and communications very open. We hope that Paris, France, provided a pleasant environment during the conference and everyone saved some time to enjoy the charm of the city.

### **SMART 2014 Chairs:**

#### **SMART Advisory Committee**

Wolfgang Leister, Norsk Regnesentral, Norway

Hoyoung Jeung, SAP Research Brisbane, Australia

Petri Koskelainen, Nokia - Sunnyvale, USA

Sherali Zeadally, University of Kentucky, USA

Susana Sargento, University of Aveiro/Institute of Telecommunications, Portugal

Rich Simpson, University of Pittsburgh, USA

Jeffrey Soar, University of Southern Queensland, Australia

Jerker Delsing, Lulea University of Technology, Sweden

Krishna Kant, George Mason University, USA

Arto Reiman, University of Oulu, Finland

Luigi Patrono, University of Salento, Italy

Dmitry Namiot, Lomonosov Moscow State University, Russia

Francine Krief, University of Bordeaux, France

Diane Cook, Washington State University, USA  
Pascal Urien, Télécom ParisTech, France

#### **SMART Industry/Research Chairs**

Christian Prehofer, Kompetenzfeldleiter Adaptive Kommunikationssysteme / Fraunhofer-Einrichtung für Systeme der Kommunikationstechnik ESK – München, Germany  
Ryosuke Ando, TTRI (Toyota Transportation Research Institute), Japan  
Petko Bakalov - Environmental Systems Research Institute, USA  
Gregor Broll, DOCOMO Euro-Labs, Germany  
Xin Chen, NAVTEQ Research, Nokia - Chicago, USA  
Yang Cui, Huawei Technologies - Beijing, China  
Rodolfo de Paz Alberola, United Technologies Research Center Ireland – Cork, Ireland  
Marko Jaakola, VTT Technical Research Centre of Finland, Finland  
Hoyoung Jeung, SAP Research Brisbane, Australia  
Lieven Trappeniers, Bell Labs Alcatel-Lucent, Belgium  
Chengyang Zhang, Teradata Inc., USA  
Fabio Pianesi, Fondazione Bruno Kessler - Trento, Italy  
Fabio Moretti, ENEA, Italy

#### **SMART Publicity Chairs**

Stephen McLaughlin, Penn State University, USA  
Christina Novitarini, PT Telkom, Indonesia  
Andrea Capitanelli, Università Politecnica delle Marche, Italy  
Christoph Soellner, Technische Universität München, F13, Germany  
Beatrice Cahour, National Centre for Scientific Research / Telecom ParisTech - Paris, France  
Jesse Kielthy, Waterford Institute of Technology, Ireland