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Open and Big Data Management and Innovation

14th IFIP WG 6.11 Conference on e-Business, e-Services, and e-Society, I3E 2015 Delft, The Netherlands, October 13–15, 2015 Proceedings



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Preface

Since its inception in 1998, the I3E Conference has brought together researchers and practitioners from all over the world. The I3E conference main area is in the field of e-business, e-services, and e-society, which are abbreviated as the three Es. The I3E conference series is truly multidisciplinary covering areas ranging from computer science to information systems and data science. The 2015 I3E conference was the 14th consecutive I3E conference. This year's conference received submissions from Asia, Europe, and South America.

The mission of IFIP Working Group 6.11 is to organize and promote exchange of information and co-operation related to all aspects of electronic business, electronic services, and electronic society (the three Es). Working Group 6.11 has members with diverse backgrounds including information systems, computer science, and business studies. The I3E conference series the is flagship event of the Working Group.

The theme of the 2014 I3E conference was "Open and Big Data Management and Innovation" Information economy and openness have been the dominating terms over the last couple of years. Data have become widely available and many innovations are based on the utilization of data. The Internet of Things (IoT) enables the availability of large volumes of data, while people create data using social media. Today we have a worldwide exchange of data and this influences our society, resulting in new business opportunities and new services. This has already resulted in the rise of "data science," which aims at better understanding how to use all these data in our information society and how it can co-evolve with its information and communication technology (ICT). This needs to make the theory of complex systems applicable to the information society.

Furthermore, there is a lack of tools and instruments to deal with the vast amount of data. Big data will have a major influence on the operating of businesses and the functioning of society. This conference contributes to advancements in areas such as data analytics, mining, visualization, sensor networks, information retrieval, and information extraction; research relating to data extraction and analytics, statistical inference, data quality, and issues such as bias, missing data, endogeneity, user interface, and visualization are encouraged. Papers are in the field of technology, business, society, or combinations thereof.

The host of the IFIP I3E conference was the Faculty of Technology, Policy and Management (TPM) at Delft University of Technology, The Netherlands. TU Delft is the largest and most comprehensive university of engineering sciences in The Netherlands. The I3E 2015 conference was organized in cooperation between three faculties of Delft University of Technology. The faculties of Technology, Policy and Management (TPM), The Faculty of Architecture and the Built Environment, and the Faculty of Electrical engineering, Mathematics and Computer Science (EEMS). Big and open data (BOLD) is an important topic at Delft University of Technology and there are two main initiatives within Delft University of Technology in this area. Delft

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Data Sciences (DSS) is a framework initiative for research activities in data science (http://www.delftdatascience.tudelft.nl/). DDS is characterized by the focus on the engineering aspects of data science, in line with TU Delft's key strengths. Furthermore there is the Knowledge Center Geoinformation Governance, which conducts research on institutional, legal, and organizational aspects of sharing and (re)using geographical information (http://www.bk.tudelft.nl/en/about-faculty/departments/otb-research-for-the-built-environment/knowledge-centre-geoinformation-governance/).

Making a successful conference requires resources and commitment. We would like to thank the authors for their submissions. We also wish to thank the reviewers for ensuring the academic standard of the conference. We wish to extend our thanks to Jo-Ann Karna, Laura Bruns, Diones Supriana, and Martijn Milikan. Finally, we would like to thank everyone involved in organizing the conference.

Enjoy reading!

August 2015

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