Lecture Notes in Computer Science

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Preface

Following the previous six successful events of IDCS – IDCS 2008 in Khulna, Bangladesh, IDCS 2009 in Jeju Island, Korea, IDCS 2010 and IDCS 2011 in Melbourne, Australia, IDCS 2012 in Wu Yi Shan, China, IDCS 2013 in Hangzhou, China - IDCS 2014 was the seventh in the series to promote research in diverse fields related to the Internet and distributed computing systems.

The emergence of the Web as a ubiquitous platform for innovations has laid the foundation for the rapid growth of the Internet. Side-by-side, the use of mobile and wireless devices such as PDAs, laptops, and cell phones for accessing the Internet has paved the ways for related technologies to flourish through recent developments. In addition, the popularity of sensor networks is promoting a better integration of the digital world with the physical environment towards the future Internet of Things.

IDCS 2014 received innovative papers on emerging technologies related to the Internet and distributed systems to support the effective design and efficient implementation of high-performance networked systems. The audience included researchers and industry practitioners who were interested in different aspects of the Internet and distributed systems, with a particular focus on practical experiences with the design and implementation of related technologies as well as their theoretical perspectives.

IDCS 2014 received a large number of submissions (from 24 different countries), from which 23 regular papers and 15 short papers were accepted after a careful review and selection process. This year’s conference also featured one invited talk, entitled “Seamless Data Communications in Space Networks”, from Prof. Mohammed Atiquzzaman, Edith J. Kinney Gaylord Presidential Professor, School of Computer Science University of Oklahoma. Prof. Atiquzzaman is also editor-in-chief of the Journal of Network and Computer Applications, Elsevier.

The contributions to IDCS 2014 covered the topics of ad-hoc and sensor networks; Internet and Web technologies; network operations and management; multi-agent systems; cloud-based information infrastructures.

IDCS 2014 was held on the wonderful Tyrrenian coast of the Calabria region, Italy.

The conference organization was supported by Sensyscal S.r.l. (a spin-off of the University of Calabria whose research and development mission is directed to the development of innovative sensor-based and IoT systems in different application domains ranging from m-Health to building automation and environmental/ambient smart control) and the DIMES (Department of Informatics, Modeling, Electronics and Systems) of the University of Calabria.

Further technical co-sponsorship was provided by the Commonwealth Scientific and Industrial Research Organization (CSIRO), the national government
body of scientific research in Australia, and Daily Positive (D+), a non-profit media initiative.

The successful organization of IDCS 2014 was possible thanks to the dedication and hard work of a number of individuals.

Specifically, we would like to thank Antonio Guerrieri (web chair) and Raffaele Gravina for their commendable work with the proceedings preparation and conference organization. We also express our gratitude to the general chair Giancarlo Fortino, University of Calabria, Italy, and the program chairs (Giuseppe Di Fatta, Wenfeng Li, Sergio Ochoa, Alfredo Cuzzocrea) and industry chair (Mukaddim Pathan) for their support of the conference. Last but not the least, we are thankful to all the volunteers, specifically Claudio Savaglio and Stefano Galzarano for their efforts in the conference organization during 22–24 September 2014.

September 2014

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