Editorial

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Ivan Stojmenovic

Deceased; Formerly of the University of Ottawa, Canada

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Biographical notes: Guojun Wang received his BSc in Geophysics, an MSc in Computer Science, and a PhD in Computer Science from Central South University, China. He is currently a Professor at Guangzhou University and Central South University. He has been an Adjunct Professor at Temple University, Philadelphia, USA; a Visiting Scholar at Florida Atlantic University, Boca Raton, USA; a Visiting Researcher at the University of Aizu, Japan; and a Research Fellow at the Hong Kong Polytechnic University. His research interests include transparent computing, cloud computing, trusted computing, and information security. He is a distinguished member of the CCF, and a member of the IEEE, ACM, and IEICE.

Ivan Stojmenovic has passed away after tragic car accident on 3rd November, 2014. During his eulogy at the funeral service that was held on 9th November, Claude Laguë, Dean of the Faculty of Engineering of the University of Ottawa, has reminded us of Professor Stojmenovic's important contribution to the Faculty and uOttawa at large (http://engineering.uottawa.ca/news/memoriam-dr-ivan-stojmenovic-renowned-expert-and-professor): "Our university has tremendously benefited from his professional contributions in teaching, student supervision, research, and service since he joined our Department of Computer Science back in 1988 as an Assistant Professor. His passion and hard work allowed him to rapidly progress through the ranks and by 1995 he was a Full Professor of computer science and he established himself as an internationally recognised expert who had an exceptional breadth of professional interests". He received his PhD in Mathematics. He had been a renowned expert and Professor at the University of Ottawa, Canada. He held regular and visiting positions in Serbia, Japan, USA, Canada, France, Mexico, Spain, UK, Hong Kong, Brazil, Taiwan, China and Australia. He published over 300 papers, and edited seven books on wireless, ad hoc, sensor and actuator networks and applied algorithms with Wiley. He was Editor-in-Chief of *IEEE Transactions on Parallel and Distributed Systems* (2010–2013), and Founder and Editor-in-Chief of three journals. He was on Thomson Reuters list of Highly Cited Researchers (from 2013; less than 300 computer scientist). He was Fellow of the IEEE (Communications Society,

class 2008), and Canadian Academy of Engineering (since 2012), and Member of the Academia Europaea (The Academy of Europe), from 2012 (section: Informatics).

Gregorio Martinez Perez is a Full Professor in the Department of Information and Communications Engineering of the University of Murcia, Spain. His research interests include security and management of distributed communication networks. He received his PhD in Computer Science from the University of Murcia. He has published more than 100 journal papers and conference papers. He has been involved as collaborator or supervisor in several open-source software projects. He is also on the editorial or review board of more than 20 international journals and is involved in several national and European research projects.

Michael Greene is Intel VP and GM of System Technologies & Optimization of Intel's Software and Services Group. He leads a worldwide organisation responsible for a broad range of development, enabling, optimisation efforts including system firmware, modelling and simulation solutions, power analysis, client/server and big data software stack optimisations for best user experience. He joined Intel in 1990, after graduating from the Massachusetts Institute of Technology and has managed several product developments, research efforts, and engineering groups. He has served as Intel's initiative owner for power efficiency, pre silicon software development, and has driven new technology benchmarking throughout his career.

Computing paradigms have greatly evolved with rapid advances in hardware, software and networking technologies. Transparent computing (TC), as user-controlled cloud computing, is an emerging technology with features of streaming-based scheduling and execution, user orientation and platform independence. TC enables users to accomplish local tasks efficiently and flexibly through any type of devices while demanding from computing and storage services residing in remote servers. Motivated by TC's fundamental features and their combination with existing techniques, this special issue on *Advances in Transparent Computing* aims to collect quality research papers with a solid background in both theoretical and practical aspects. Through a rigorous double-blind review process, four papers are selected for publication in this special issue.

The first paper, *Performance Modelling for Transparent Computing using Stochastic Petri Nets*, studies the performance evaluation of transparent computing, which proposes the Stochastic Petri Net models, and compares transparent computing paradigm with some traditional computing paradigms, both quantitatively and qualitatively.

The second paper, *A Cost-efficient Architecture for the Campus Information System based on Transparent Computing Platform*, presents a novel architecture named CISTC for the campus information system (CIS) based on transparent computing (TC) platform, as well as the development, deployment and maintenance experiences to improve the economic efficiency.

In the third paper, *Cross Platform Method for Ubiquitous Computing and Its Application to Mobile Terminal*, the authors present a method of cross platform mobile transparent computing (CPMTC) for mobile devices. A mobile pre-boot firmware (MPBF) is designed to stream OS image data to the device through a network. In application layer, the authors devise a method of designing applications based on HTML5, which ensures that applications are available for different OSes.

The last paper, *Personalised Content Recommendation based on Field Authorities in Transparent Computing*, proposes a novel Collaborative Filtering (CF) approach based on field authorities to achieve the genre tendency of items by mapping tags to genres and simulates a fine-grained word-of-mouth recommendation mode.

We would like to thank all the reviewers for their constructive comments, and thank all the authors who submitted their precious research work to this special issue.