

State of the Journal

Paolo Montuschi

WELCOME to the June 2015 Issue of the *IEEE Transactions on Computers*.

Since the end of 2014 and the beginning of 2015, the appointments of a few associate editors have regrettably expired. Together with the readers and authors of *TC*, I want to personally thank the following colleagues for their unselfish and dedicated service:

David Bader, Paolo Bellavista, Chen Chandra, Tom Conte, Laurent Imbert, Rami Melhem, Ethan Miller, Lei Wang, Yuanyuan Yang, Albert Cheng, Sung Woo Chung, Florent de Dinechin, Masahiro Fujita, Minyi Guo, Hsien-Hsin Sean Lee, Keqin Li, Ying-Dar Lin, Jim Plusquellic, Eric Rotenberg, Gang Qu, Hamid Sarbazi-Azad, Domenico Talia, Huapeng Wu, Cheng-Zhong Xu, Jingling Xue.

Starting March 1, 2015 the following 10 highly reputed colleagues have joined the editorial board of *TC* to serve as associate editors:

Wenping Wang, <http://www.cs.hku.hk/research/profile.jsp?teacher=wenping>

Elisardo Antelo, <http://www.ac.usc.es/elisardo>

Natalie Enright Jerger, <http://www.eecg.toronto.edu/~enright/>

Paulo Verissimo, http://wwwen.uni.lu/snt/people/paulo_verissimo

Peter Desnoyers, <http://www.ccs.neu.edu/home/pjd/>

Hironori Kasahara, <http://www.kasahara.cs.waseda.ac.jp/kasahara.html.en>

Alex Yakovlev, <http://www.ncl.ac.uk/eee/staff/profile/alex.yakovlev>

Giuseppe Lipari, <http://www.lifl.fr/~lipari/>

Weiqiang Liu, <http://ceie.nuaa.edu.cn/weiqiangliu/>

Daniel Zeng, <https://mis.eller.arizona.edu/people/daniel-zeng>

You will find their short biographies in the next pages; additional appointments will follow in the next months.

As per April 22, 2015 (going-to-press deadline of this issue), I would like to share with you several important news:

1. At the beginning of February 2015, *TC* went through a detailed journal review by the IEEE. This process went very smoothly and has led to a positive evaluation. The review committee has remarked the needs for *TC* to improve the turnaround time and focus the publication “on research in areas of current interest to the readers” (as in the scope of *TC* and the Computer Society). I have already started working with the editorial board, to fully and speedily meet these challenges.
2. Starting May 2015, the monthly featured paper of *TC* will also have a short video abstract available in Chinese; it will be posted on Youtube and Youku. You can reach the *TC* multimedia page in Chinese, pointing at the Youtube and Youku channels, directly from the main *TC* pages <http://www.computer.org/web/tc>. I wish to thank professor Weiqiang Liu of NUAAs (PRC), for preparing these videos and maintaining the Youku channel.
3. As of April 22, 409 papers have been submitted, 715 decisions have been made, out of which 539 are final decisions. My sincere gratitude goes to the editorial board and reviewers for their help and support.
4. To reduce the backlog in the accepted-to-printed queue, a large and temporary increase of the page-budget has been requested in March to the IEEE.

As evidenced by the above remarks and achievements, there is a substantial momentum in *TC* and on behalf of the editorial board, I invite all of you to stay tuned and continue to follow and contribute to the flagship Transactions of the Computer Society.

Thank you again for your continued support.

Paolo Montuschi
Editor-in-Chief





Elisardo Antelo received the graduation degree in physics, in 1991 and the PhD degree in computer engineering, in 1995 from the University of Santiago de Compostela, Spain. In 1992, he joined the Departamento de Electronica e Computacion at the University of Santiago de Compostela. From 1992 to 1998, he was an assistant professor and since 1998, he has been a tenured associate professor in this department. He was a research visitor at the University of California at Irvine several times between 1996 and 2000 and at the Politecnico di Torino in 2012. He is a member of the computer architecture group at the University of Santiago de Compostela. Since 2001, he has been involved in the program committee of the IEEE Symposium on Computer Arithmetic (program co-chair in the 2011 edition and a member of the Steering Committee). He was associate editor of the *IEEE Transactions on Computers* from 2007 to 2012, and of *Integration, the VLSI Journal* from 2011 to 2012. His primary research and teaching interest are in digital design and computer architecture with current emphasis on high-speed and low-power numerical processors, application-specific modules, computer arithmetic and design issues related to multicore processors.



Peter Desnoyers received the PhD degree in computer science from the University of Massachusetts at Amherst in 2008, after a 15-year career in industry, and is an associate professor in the College of Computer and Information Science at Northeastern University, Boston, Massachusetts, where he directs the Solid State Storage Lab and is a visiting scholar at the Harvard School of Engineering and Applied Sciences. His research interests are in the area of operating systems and storage, especially in the area of algorithms for NAND flash and Shingled Magnetic Recording. He is a member of the IEEE and ACM.



Natalie Enright Jerger received the bachelor's degree from Purdue University in 2002 and the PhD degree from the University of Wisconsin-Madison in 2008. She is an associate professor in the Edward S. Rogers Sr. Department of Electrical and Computer Engineering at the University of Toronto. She is a recipient of the Ontario Ministry of Research and Innovation Early Researcher Award in 2012, the 2014 Ontario Professional Engineers Young Engineer Medal recipient, and a 2015 Alfred P. Sloan Research Fellow. She served as the program chair of the 20th International Symposium on High Performance Computer Architecture. Her current research explores performance and power optimizations for on-chip networks, memory-systems and approximate computing in many-core architectures. She is a senior member of the IEEE and ACM.



Hironori Kasahara received the PhD degree in electrical engineering from Waseda University, Tokyo in 1985. He has been a professor of the Department of Computer Science and Engineering since 1997, a director of the Advanced Multicore Processor Research Institute since 2004, Waseda University via an assistant professor in 1986, and an associate professor in 1988. He was a visiting scholar at the University of California, Berkeley and the University of Illinois at Urbana-Champaign's Center for Supercomputing R&D. He received IEEE Computer Society Golden Core Member Award, Young Author Prize at International Federation of Automatic Control World Congress, IPSJ Sakai Memorial Special Research Award and a Science and Technology Prize in the commendation by Minister of Education, Culture, Sports, Science and Technology. He led four Japanese national projects on parallelizing compilers, multicores and green computing supported by METI/NEDO. He has served as a chair or a member of 220 government and society committees including a chair of the IEEE Computer Society Multicore STC and IPSJ SIG on Computer Architecture, and METI computer research roadmap and a member of the IEEE Computer Society Board of Governors and MEXT Earth Simulator and K supercomputer committees. His works were presented as

more than 200 papers, 125 invited talks, 26 patents, and 450 newspapers and web articles.



Giuseppe Lipari graduated in computer engineering from the University of Pisa, Italy, in 1996. He received the PhD degree in computer engineering from the Scuola Superiore Sant'Anna of Pisa in 2000, where he also worked as an associate professor until 2014. From 2012, he spent two years at the École Normale Supérieure de Cachan, France as a Marie-Curie fellow. From 2014, he is a full professor of computer science at the University of Lille, where he is part of the *Embedded Real-Time Adaptive system Design and Execution* (Émeraude) team of the *Centre de Recherche en Informatique, Signal et Automatique* (CRISTAL) of Lille. His research interests span over multiple domains related to embedded systems: real-time operating systems, scheduling algorithms, formal methods, timed automata, and wireless sensor networks. During his career, he has co-authored about 100 papers in peer-reviewed scientific journals and proceedings of international conferences.



Weiqiang Liu received the BSc degree in information engineering from the Nanjing University of Aeronautics and Astronautics, Nanjing, China and the PhD degree in electronic engineering from the Queen's University Belfast (QUB), Belfast, United Kingdom, in 2006 and 2012, respectively. In 2013, he joined the faculty of the College of Electronic and Information Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China, where he is currently an associate professor. He was a research fellow in the Institute of Electronics, Communications and Information Technology at QUB from August 2012 to November 2013. He has authored a research book and published more than 20 journals and conference papers. His research interests include emerging technologies in computing systems, cryptographic hardware and security, VLSI for signal processing and low power design. He is a senior member of the IEEE and the Chinese Institute of Electronics, a member of the IEEE Computer Society and IEEE Circuits and Systems Society.



Paulo Esteves Verissimo is currently a professor and FNR PEARL chair at the University of Luxembourg (UL) Faculty of Science, Technology and Communication, and a head of the CritiX research group at UL's Interdisciplinary Centre for Security, Reliability and Trust. He is a chair of the IFIP WG 10.4 on Dependable Computing and Fault-Tolerance and a vice-chair of the Steering Committee of the IEEE/IFIP DSN conference. He is currently interested in secure and dependable distributed architectures, middleware and algorithms for: resilience of large-scale systems and critical infrastructures, privacy and integrity of highly sensitive data, and adaptability and safety of real-time networked embedded systems. He is author of more than 170 peer-refereed publications and co-author of five books. He is a fellow of the IEEE and the ACM.



Wenping Wang received the PhD degree in computer science from the University of Alberta, Canada and then joined HKU in 1993. He is a professor and head of the Computer Science Department at The University of Hong Kong. He conducts research in computer graphics, visualization, geometric computing, and scientific computing, and has published more than 100 journals papers in these areas. He is journal associate editor of *Computer Aided Geometric Design (CAGD)*, *Computers & Graphics (CAG)*, *Computer Graphics Forum (CGF)*, and *IEEE Computer Graphics and Applications (CG&A)*, and *IEEE Transactions on Visualization and Computer Graphics (TVCG)* from 2008 to 2012. He is a program chair of Pacific Graphics 2003, ACM Symposium on Physical and Solid Modeling (SPM) 2006, International Conference on Shape Modeling (SMI) 2009, and Advances in Architectural Geometry (AAG) 2014. He is also conference chair of Pacific Graphics 2012, ACM Symposium on Physical and Solid Modeling (SPM) 2013, and SIGGRAPH Asia 2013. He received the Outstanding Researcher Award of The University of Hong Kong in 2013.



Alex Yakovlev was a Dream Fellow of the prestigious UK Engineering and Physical Sciences Research Council in 2011-12 to investigate different aspects of energy-modulated computing. He received DSc from Newcastle University in 2006, and PhD from St. Petersburg Electrical Engineering Institute in 1982. Since 1991 he has been at Newcastle University, where he is currently leading the microSystems research group at the School of Electrical and Electronic Engineering. His main interests and publications are in the field of modelling and design of asynchronous, concurrent, real-time and real-power systems, and autonomous systems for survival. He has published eight authored and edited monographs and more than 300 papers in academic journals and conferences, has managed over 30 research contracts. He has supervised more than 40 PhD students. For more information: <http://www.ncl.ac.uk/eee/staff/profile/alex.yakovlev>.



Daniel Zeng received the MS and PhD degrees in industrial administration from a joint program between the Graduate School of Industrial Administration and the Robotics Institute at Carnegie Mellon University, and the BS degree in economics and operations research from the University of Science and Technology of China, Hefei, China. He is gentle family professor in the Department of Management Information Systems at the University of Arizona and a research fellow at the Institute of Automation, Chinese Academy of Sciences. His research interests include intelligence and security informatics, infectious disease informatics, social computing, recommender systems, software agents, spatial-temporal data analysis, and business analytics. He has published one monograph and more than 300 peer-reviewed articles. He currently serves as the editor-in-chief of *IEEE Intelligent Systems*. His research has been mainly funded by the US National Science Foundation, the US National Institutes of Health, the US Department of Homeland Security, the National Natural Science Foundation of China, and the Ministry of Health of China. He is active in information systems and public health informatics professional activities and is a president elect for the IEEE Intelligent Transportation Systems Society and the past chair of INFORMS College on

Artificial Intelligence.

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