Greetings from the Editor-in-Chief’s desk. It is my privilege to continue to serve our community in my second year as the Editor-in-Chief of IEEE Transactions on Parallel and Distributed Systems (TPDS). Thanks to the outstanding efforts of our associate editors, TPDS continues to be one of the healthiest IEEE Transactions. At the time of the writing of this editorial (May 2019) we had already received 1,398 submissions during my tenure, and we continue to process these submissions as efficiently and effectively as possible, while maintaining a rigorous process for evaluating the excellent research contributions in this area and the high quality of the journal.

As I have noted in the past, we are seeing rapid and often dramatic changes in the research and technology landscapes in our field, and TPDS needs to respond to this dynamic and rapidly evolving publication landscape. A key aspect in responding these changes is recruiting distinguished editorial board members who bring required expertise and experience. I would like to use this editorial to welcome our distinguished colleagues (listed below) who have joined the TPDS Editorial Board in the past year, and I would like to sincerely thank all our associate editors for their diligence, dedication and outstanding service to our community.

TPDS is committed to enabling reproducible research so that other researchers can validate published work and reach the same scientific conclusions, potentially using different datasets or methods. I would also like to use this opportunity to let you know that we will very soon be announcing the TPDS Reproducibility Initiative Pilot. Authors who have published in TPDS can make their published article more reproducible and earn a reproducibility badge by submitting their associated code for post-publication peer review. While the pilot will initially target previously published TPDS papers, we plan to expand it to include accepted papers in the near future. Please stay tuned for further details.

Finally, I would like to thank all of the authors who have submitted their manuscripts to TPDS, and to all of the peer reviewers for thorough evaluations of these works.

I hope you will continue to submit your best papers to TPDS!

Manish Parashar,
Editor-in-Chief

TPDS Associate Editor (2018-2019 Appointments)

Kirk W. Cameron is a professor of computer science and a research fellow with the College of Engineering at Virginia Tech, USA, where he directs the stack@cs Center for Computer Systems. He is also associate department head for Research and Advancement. The central theme of his research is to improve power and performance efficiency in high performance computing (HPC) systems and applications.

Chen Ding is a professor of computer science with the University of Rochester, USA. He has published extensively in the areas of programming languages, parallel computing, memory management, operating systems, and computer architecture, and serves regularly in conference committees in these areas.

Beniamino Di Martino is full professor with the University of Campania, Italy. His research interests include: high performance computing, parallelizing compilers, cloud computing, artificial intelligence and semantic web services.

Wu-chun (“Wu”) Feng is a professor and Elizabeth & James E. Turner fellow with the Departments of Computer Science Science, Electrical & Computer Engineering, Health Sciences, and Biomedical Engineering and Mechanics at Virginia Tech, USA. His research interests include broadly at the synergistic intersection of computer architecture, systems software and tools, and applications for parallel and distributed systems.

For information on obtaining reprints of this article, please send e-mail to: reprints@ieee.org, and reference the Digital Object Identifier below. Digital Object Identifier no. 10.1109/TPDS.2019.2922024
Howie Huang is a full professor with the Department of Electrical and Computer Engineering, with a courtesy appointment in Department of Computer Science, George Washington University, USA. Motivated by the needs of big data and cybersecurity applications, he works at the intersection of algorithms, computer architecture and systems, with recent research focus on developing high-performance computing and machine learning techniques tailored for large-scale graph datasets.

Kamesh Madduri is an associate professor with the computer science and engineering Department, The Pennsylvania State University, USA. He conducts research on the design of new parallel algorithms and software tools for analyzing massive data sets and in support of large computational science simulations. His current research focuses on four topics: algorithms for graph analysis on emerging parallel systems, computational genomics, algorithms for particle simulations in plasma physics, and indexing and query strategies for high-dimensional scientific and transportation data sets.

Kathryn Mohror is the group leader for the Data Analysis Group at the Center for Applied Scientific Computing at Lawrence Livermore National Laboratory (LLNL), USA. Her research on high-end computing systems is currently focused on scalable fault tolerant computing and I/O for extreme scale systems. Her other research interests include scalable performance analysis and tuning, and parallel programming paradigms.

Marco Domenico Santambrogio is an associate professor with Politecnico di Milano, Italy, since 2018, and an adjunct professor with the College of Engineering of the University of Illinois at Chicago (UIC) since 2009. His research interests include reconfigurable computing, computer architectures, distributed systems, high performance computing, hardware/software codesign, heterogeneous computing infrastructure.

Rafael Tolosana-Calasanz is currently an associate professor (with tenure track) with the Computer Science Department, the University of Zaragoza, Spain. His research interests include distributed and parallel systems, problem solving environments, resource management in distributed systems, and fault tolerance.

Ana Lucia Varbanescu is an assistant professor with the University of Amsterdam, the Netherlands, in the Systems and Networks Engineering group. Her research stems from HPC and investigates the use of multi- and many-core architectures for HPC, with a special focus on performance analysis and prediction for both scientific and irregular, data-intensive applications.

Yun Yang is professor with the Faculty of Science, Engineering & Technology, Swinburne University School of Software and Electrical Engineering. His research expertise spans areas including cloud computing, distributed systems, workflows, software development environments and service-oriented computing.

Masahiro Yasugi is professor with the Department of Artificial Intelligence, Kyushu Institute of Technology, Japan. His research interests include programming languages and parallel processing.

Bharadwaj Veeravalli, is associate professor with the Department of Electrical and Computer Engineering, Communications and Information Engineering (CIE) division, at The National University of Singapore, Singapore. His main stream research interests include cloud/grid/cluster computing, scheduling in parallel and distributed systems, embedded and multimedia computing.

Jidong Zhai is a tenured associate professor with the Computer Science Department, Tsinghua University, China. His research interests include high performance computing, parallel computing, fault tolerance, heterogeneous computing, compiler, and performance evaluation.
Qin Zheng is a senior scientist and deputy Department director of the Computing Science Department at the Institute of High-Performance Computing (IHPC), Agency for Science, Technology and Research (A’STAR), Singapore. His research interests include distributed systems, cloud computing, big data applications, and smart cities.

Sushil K. Prasad (BTech’85 IIT Kharagpur, MS’86 Washington State, Pullman; PhD’90 Central Florida, Orlando - all in Computer Science/Engineering) is a Professor of Computer Science at Georgia State University (GSU) and Director of Distributed and Mobile Systems (DiMoS) Lab. He has carried out theoretical as well as experimental research in parallel and distributed computing, resulting in 140+ refereed publications, several patent applications, and about $3M in external research funds as principal investigator and over $6M overall (NSF/NIH/GRA/Industry). Over the last 25+ years, he has researched on the parallel, distributed, and data intensive computing and systems. Over the past few years his group has explored data intensive computation on Geospatial datasets over cloud, multicore, and GPU, leading to a parallel GIS system for overlay computation over polygonal data on each of these platforms (using Azure API, MPI, Hadoop, and CUDA), and a parallelized R-tree over GPUs. He has been honored as an ACM Distinguished Scientist in Fall 2013 for his research on parallel data structures and applications. He was the elected chair of IEEE Technical Committee on Parallel Processing for two terms (2007–2011), and received its highest honors in 2012 - IEEE TCPP Outstanding Service Award. Currently, he is leading the NSF/IEEE-TCPP curriculum initiative on parallel and distributed computing, in coordination with ACM/IEEE CS 2013 curriculum taskforce, with a vision to ensure that all computer science and engineering graduates are well-prepared in parallelism through their core courses in this era of multi- and many-cores desktops and handhelds. He is currently leading the Office of Advanced Cyberinfrastructure (OAC) Learning and Workforce Development cluster, in coalescing its emerging research and education programs such as CAREER, CRII, REU sites, and STEM+C around translational cyberinfrastructure research agenda. He has helped develop two new programs, CyberTraining and OAC Research Core, based on multidisciplinary community needs and national priorities such as National Strategic Computing Initiative (NSCI) Presidential Executive Order, July 2015.

For more information on this or any other computing topic, please visit our Digital Library at www.computer.org/publications/dlib.