A Message from the New Editor-in-Chief

Hui Lei, Fellow, IEEE

It is a privilege and great honor for me to serve as the Editor-in-Chief (EIC) of the IEEE Transactions on Cloud Computing (TCC). I am grateful to the TCC EIC Search Committee and to the TCC Steering Committee for their confidence in me and for providing me with this opportunity to serve our community and to influence the future of the premier publication in the ever important field of cloud computing. TCC has accomplished much since its launch in 2013, thanks to the devoted efforts of the editorial board and the continuous support of the IEEE Computer Society staff. TCC has successfully published 10 issues organized in three volumes, with a highly competitive acceptance rate of around 20 percent. TCC has also maintained a healthy pipeline of submissions for the upcoming issues, including several special issues. I want to express my deep gratitude to the inaugural EIC, Professor Rajkumar Buyya, and the acting EIC, Dr. Irena Bojanova, for their leadership and dedication. They have established a high standard for me to meet and strive to improve upon.

It is an exciting time for cloud computing research and development. Compared to other disciplines in information technologies, cloud computing has a number of unique characteristics, which should be reflected in the operational model of TCC. First, cloud computing is growing rather rapidly in terms of both enabling technology and societal uptake. In the relatively short period since its inception, cloud computing has expanded its scope from infrastructure virtualization and cost reduction, to software DevOps and operational excellence based on cloud-native micro-service architecture, and to cloud-empowered analytics and cognitive capabilities that are triggering major transformation of the business landscape. There is thus a critical need for timely dissemination of the latest knowledge and techniques of cloud computing. Second, cloud computing is multi-disciplinary by nature. Cloud computing involves many subject areas, including computer architecture, storage, networking, resource management, data management, programming model, software engineering, IT service management, security, energy, performance, and dependability. In addition, cloud computing has a large intersection with other pillars of research such as big data analytics, mobile computing, the Internet of Things, cognitive computing, enterprise computing, social networking, and regulations and compliance. It is therefore highly valuable to provide overarching visibility on the challenges and development across the broad field of cloud computing. Finally, industry has been playing a key part in the formation and advancement of cloud computing. Salesforce.com, Amazon EC2, Microsoft Azure, and Google App Engine are widely considered important milestones in the early history of cloud computing. More recent initiatives in cloud computing, such as OpenStack, CloudFoundry, and Hadoop, have also been driven by industry with support from large open-source software communities. Industry products like the above have provided both context for academic research and platform for enterprise innovation. Adequate industry participation is thus essential to the success of any forum for exchanging ideas related to cloud computing.

My goal is to take TCC to the next level of excellence, by enhancing the journal’s quality, broadening its reach, and improving its reputation. I will monitor and proactively improve the efficiency of the manuscript review and publication processes. I will establish performance targets for various editorial tasks, and work closely with the associate editors and reviewers to meet those targets. I will further strengthen the editorial board in order to have diversified and balanced representation of different countries, constituencies, organizations, and subject areas. I will find creative ways to collaborate with the top-notch conferences related to cloud computing. I will explore arrangements to have the best papers from those conferences be fast-tracked for review and publication in TCC after substantial extension, and to have select papers from TCC presented in special sessions of those conferences, creating a win-win situation for both TCC and the conferences. With help from the editorial board, I would like to develop a coherent plan for TCC special issues. It is my intent to have TCC-initiated special issues complement externally proposed special issues, and thereby provide more thorough coverage of important topics in cloud computing and foster research in strategic areas. I will further leverage various communication channels, including social media, to promote TCC and to build rapport with the broad TCC community of editors, reviewers, authors, and readers.

Since the basis for any future improvement in the utility and reputation of TCC lies in increasing the number of high-quality submissions, I encourage the cloud computing community at large to submit its best and latest research results to TCC. I also welcome authors and readers to share with me ideas on how to make TCC better serve their interests and needs, as well as those of the entire community.

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/TCC.2016.2519298