

Special Issue for the 13th IEEE International Conference on Networking, Architecture, and Storage (NAS 2018)

This special issue focuses on all the aspects for cutting-edge research on networking, high-performance computer architecture, and parallel and distributed data storage technologies. The purpose of this special issue is to provide a high-quality international forum for presentations and discussions of innovative ideas, recent research results on networking, storage, and architectures. This call is open for all contributions, but also invites selected best papers from the 13th IEEE international conference on Networking, Storage, and Architectures (NAS 2018) on Oct. 11-14, 2018 in Chongqing, China.

The guest editors of the special issue are

- Xubin He, Professor of Temple University
- Weijun Xiao, Assistant Professor of Virginia Commonwealth University

Topics of interests include, but are not limited to:

- Processor, cache, memory system architectures
- Parallel and multi-core architectures
- GPU architecture and programming
- Data-center scale architectures
- Architecture for handheld or mobile devices
- Accelerator-based architectures
- Application-specific, reconfigurable or embedded architectures
- HW/SW co-design and tradeoffs
- Power and energy efficient architectures and techniques
- Effects of circuits and emerging technology on architecture
- Cloud and grid computing
- Architecture, networking or storage modeling and simulation methodologies
- Non-volatile memory technologies
- Mobile and wireless networks Ad hoc and sensor networks
- Network security
- Network information theory
- Software defined networking
- Network applications and services
- Network architecture and protocols
- Virtual and overlay networks
- Network modeling and measurement
- Storage management
- Storage performance and scalability

- File systems, object-based storage
- Energy-aware storage
- SSD architecture and applications
- Parallel I/O
- Cloud storage
- Storage virtualization and security
- Software defined storage
- Big Data infrastructure
- Big Data services and analytics

Submissions must follow these guidelines:

- Please submit your paper to Manuscript central as NAS2018 special issue.
- Submissions should be prepared for publication according to the journal submission guidelines
- The submitted papers must have at least 50% different material beyond any other conference publication.

Important dates are as follows

Submission Deadline: December 31, 2018

Notification: Feb. 28, 2019

First round of reviews: Feb. 28, 2019

Second round of reviews: April 30, 2019

Final Decision: April 30, 2019

Camera-ready due: May 15, 2019

Short bios for guest editors

Dr. Xubin He is a professor in the Department of Computer and Information Sciences at Temple University. He has been conducting extensive research in the area of *data storage and I/O systems*. His research interests include networked storage, big data management, storage cache and disk I/O, high availability and reliable computing. Dr. He's research has been mainly sponsored by the U.S. National Science Foundation (NSF). He has authored and co-authored many [technical articles](#) in prestigious journals such as IEEE Transactions on Parallel and Distributed Systems (TPDS), Journal of Parallel and Distributed Computing (JPDC), ACM Transactions on Storage (ToS), and IEEE Transactions on Dependable and Secure Computing (TDSC), and at international conferences, including the USENIX Conference on File and Storage Technologies (FAST), EuroSys, USENIX Annual Technical Conference (ATC), ACM International Conference on Supercomputing (ICS), IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), IEEE International Parallel and Distributed Processing Symposium (IPDPS), IEEE International Conference on Local Area Networks (LCN), etc. Graduate students who have graduated under Dr. He's supervision usually work in computer industry or research institutions as computer engineers or design architects. Dr. He has served as a panelist for NSF, also as a general/program chair and a technical committee member for many professional conferences in the field. He received the Ralph E. Powe Junior

Faculty Enhancement Award in 2004 and the Sigma Xi Research Award (TTU Chapter) in 2010 and 2005. He is a senior member of the IEEE, a member of the IEEE Computer Society and USENIX.

Dr. Weijun Xiao is an assistant professor of Electrical and Computer Engineering at Virginia Commonwealth University (VCU). Prior to join VCU, Dr. Xiao was a research associate in the Department of Electrical and Computer Engineering at the University of Minnesota-Twin Cities. He was a recipient of the prestigious Computing Innovation Fellowship sponsored by the National Science Foundation and the Computing Research Association in 2009. He received a Best Paper Award at the 30th IEEE International Conference on Computer Design (ICCD 2012). He published more than 40 papers at premier conferences and journals such as ISCA, ICDCS, ICS, and IEEE Transactions on Parallel and Distributed Systems (TPDS). His research interests include high-performance and GPU computing, data storage, embedded systems, computer architecture, and performance evaluation. Dr. Xiao holds three U.S. patents. He is a senior member of the IEEE and a member of the IEEE Computer Society.