



an Open Access Journal by MDPI

## Advances in High Performance Computing and Scalable Software

Guest Editors:

**Prof. Dr. Lenore Mullin**

Department of Computer  
Science, University at Albany,  
Albany, NY 12222, USA

**Prof. Dr. John L. Gustafson**

1. Department of Computer  
Science, National University of  
Singapore, Singapore City,  
Singapore  
2. Vq Research, Inc., Mountain  
View, CA 94043, USA

Deadline for manuscript  
submissions:

**30 September 2024**

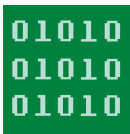
### Message from the Guest Editors

HPC and scalable software pose numerous challenges to developers: achieving scalable performance, numerical accuracy and bitwise reproducibility, and ease of programming diverse architectures through tools (OpenMP, OpenACC, etc.) as well as advanced compiler techniques to allow application programmers to exploit current and future hardware designs without exposing them to machine-specific details.

This Special Issues encourages visionary scientists to submit papers in the areas of mathematical foundations to address all topics above, as well as the following:

- (1) Numerical accuracy and bitwise reproducibility across machines and languages;
- (2) Verification of semantic and operational designs;
- (3) Domain-specific machines, operating systems, and languages;
- (4) Software tools to automate scalable performance on HPC machines without sacrificing reproducibility.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Willy Susilo

School of Computer Science and Software Engineering, University of Wollongong, Northfields Avenue, Wollongong, NSW 2522, Australia

## Message from the Editor-in-Chief

The concept of *Information* is to disseminate scientific results achieved via experiments and theoretical results in depth. It is very important to enable researchers and practitioners to learn new technology and findings that enable development in the applied field.

*Information* is an online open access journal of information science and technology, data, knowledge and communication. It publishes reviews, regular research papers and short communications. We invite high quality work, and our review and publication processing is very efficient.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [ESCI \(Web of Science\)](#), [Ei Compindex](#), [dblp](#), and [other databases](#).

**Journal Rank:** [CiteScore - Q2 \(Information Systems\)](#)

## Contact Us

---

Information Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/information](http://mdpi.com/journal/information)  
[information@mdpi.com](mailto:information@mdpi.com)  
[X@InformationMDPI](#)