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# **Stochastic Computing and Its Application**

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### Message from the Guest Editors

Stochastic computing is a paradigm that leverages the principles of randomness and probability to perform complex computations using simple hardware. Modern applications, including machine learning, neural networks, image processing, and signal processing, have demonstrated the potential benefits of stochastic computing.

This Special Issue highlights innovative approaches, theoretical developments, and practical implementations that leverage stochastic computing techniques, aiming to foster a deeper understanding of stochastic computing's potential and inspire future advancements.

Research areas may include (but are not limited to) the following:

- 1. Theoretical Foundations;
- 2. Hardware Design;
- 3. Energy-Efficient Computing;
- 4. Fault Tolerance and Robustness;
- 5. Applications in Machine Learning;
- 6. Signal Processing;
- 7. Neuromorphic Computing;
- 8. Approximate Computing

We look forward to receiving your contributions.

Prof. Dr. Hongge Li Dr. Kaining Han *Guest Editors* 







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# **Editor-in-Chief**

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