# Neuromorphic Computing Systems for Industry 4.0

Part of the Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series

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Neuromorphic Computing Systems for Industry 4.0

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Description:

As artificial intelligence (AI) processing moves from the cloud to the edge of the network, battery-powered and deeply embedded devices are challenged to perform AI functions such as computer vision and voice recognition. Microchip Technology Inc., via its Silicon Storage Technology (SST) subsidiary, is addressing this challenge by significantly reducing power with its analog memory technology, the memBrain Memory Solution. The memBrain solution is being adopted by today's companies looking to advance machine learning capacities in edge devices. Due to its ability to significantly reduce power, this analog in-memory computer solution is ideal for an AI application.

Neuromorphic Computing Systems for Industry 4.0 covers the available literature in the field of neural computing-based microchip technology. It provides further research opportunities in this dynamic field. Covering topics such as emotion recognition, biometric authentication, and neural network protection, this premier reference source is an essential resource for technology developers, computer scientists, engineers, students and educators of higher education, librarians, researchers, and academicians.
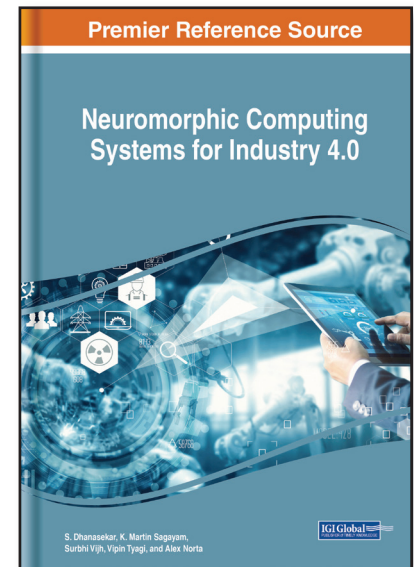
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Hardcover: $270.00   **Softcover: $205.00**   **E-Book: $270.00**   **Hardcover + E-Book: $325.00**

Topics Covered:

- Abstract Learning
- Biometric Authentication
- Cypher Attacks
- Emotion Recognition
- Hardware Security
- Hardware Trojans
- Machine Learning Algorithms
- Neural Network Protection
- Neural Networks
- Neuromorphic Accelerators

Subject: Computer Science and Information Technology

Classification: Edited Reference

Readership Level: Advanced-Academic Level (Research Recommended)

Research Suitable for: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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