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# Handbook of Energy-Aware and Green Computing

## Two-Volume Set

Edited by

Ishfaq Ahmad • University of Texas at Arlington, USA

Sanjay Ranka • University of Florida, Gainesville, USA

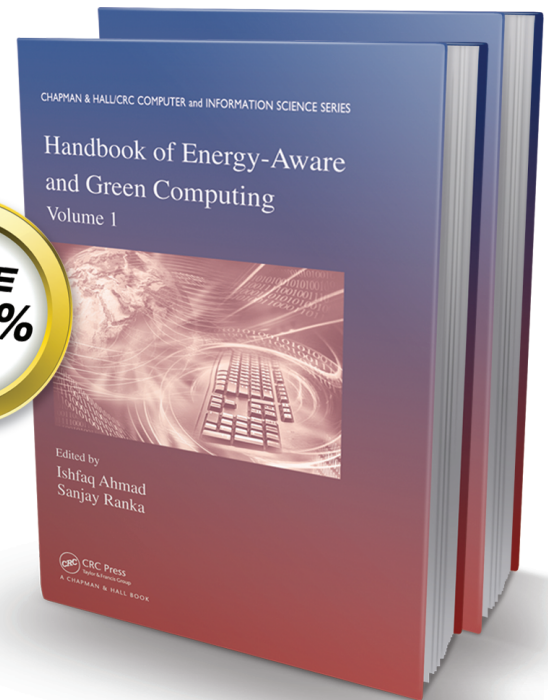
### A Landmark for Researchers in Computer Science and Engineering

Implementing energy-efficient CPUs and peripherals as well as reducing resource consumption have become emerging trends in computing. As computers increase in speed and power, their energy issues become more and more prevalent. The need to develop and promote environmentally friendly computer technologies and systems has also come to the forefront in computing research.

A pioneering publication for researchers in computer science and engineering, **Handbook of Energy-Aware and Green Computing, Two-Volume Set** is one of the first to present a comprehensive account of recent research in energy-aware and green computing. Edited by the co-chairs of the International Green Computing Conference, this handbook incorporates fundamental knowledge from all related areas, including circuit and component design, software, operating systems, networking, mobile computing, and data centers. It also discusses up-to-date research on many aspects of power-aware computing at the component, software, and system levels.

### FEATURES

- Provides the first comprehensive book on green and energy-aware computing
- Explores state-of-the-art research on various aspects of power-aware computing at the component, software, and system levels
  - Covers circuit and component design, software, operating systems, networking, mobile computing, and data centers
  - Examines the design of power-efficient architectures, power and performance tradeoffs, the restructuring of software and applications, and standards for power-aware hardware and software



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Reducing Delays Associated with Disk Energy Management

Power Efficient Strategies for Storage Systems: A Survey

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Energy Saving Techniques for Disk Storage Systems

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