SUSTAINABLE COMPUTING: INFORMATICS AND SYSTEMS

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DESCRIPTION

Sustainable computing is a rapidly expanding research area spanning the fields of computer science and engineering, electrical engineering as well as other engineering disciplines. The aim of Sustainable Computing: Informatics and Systems (SUSCOM) is to publish the myriad research findings related to energy-aware and thermal-aware management of computing resource. Equally important is a spectrum of related research issues such as applications of computing that can have ecological and societal impacts. SUSCOM publishes original and timely research papers and survey articles in current areas of power, energy, temperature, and environment related research areas of current importance to readers. SUSCOM has an editorial board comprising prominent researchers from around the world and selects competitively evaluated peer-reviewed papers.

Making computing sustainable - Software systems perspective:
- Power-aware software
- Code profiling and transformation for power management
- Power-aware middleware
- Multimedia systems
- Scheduling and allocation

Computing for sustainability - Use of computing to make the world a sustainable place:
- Use of sensors for environmental monitoring
- Smart control for eco-friendly buildings
- Green Data Centers and Enterprise Computing

Re-inventing algorithms and applications for sustainability:
- Theoretical aspect of energy, power, and temperature
- Power-aware applications
- Resource management to optimize performance and power
- Power implications for portable and mobile computing
- Algorithms for reduced power, energy and heat for high-performance computing

Modeling and evaluation of sustainable systems:
- Reliability of Power-aware computers
- Runtime systems that assist in power saving
- Models for collective optimization of power and performance
- Monitoring tools for power and performance of parallel and distributed systems
Sustainable hardware platforms and devices - Hardware and architecture perspective:
• Power aware networking
• Real-time systems
• **Power-efficient** architectures
• Efficient circuit design for energy harvesting
• Power management in memory, disk, storage and other peripheral devices
• Configurable and renewable energy
• Low power electronics
• Embedded systems, ASICs and FPGAs
• Power leakage and dissipation

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INTRODUCTION
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