



GI/ITG Workshop on Energy-aware Systems and Methods



held in conjunction with

ARCS 2010 - Architecture of Computing Systems

February 22-23, 2010; Hannover, Germany

<http://www7.informatik.uni-erlangen.de/~dressler/fg-energie/2010/>

Call for Papers

Aims and scope

Energy is considered a critical or even the most critical resource in many computing systems. Applications comprise a wide range of system capabilities including cloud computing, mobile laptops or PDAs, as well as cell phones, sensor networks, and deeply embedded devices. Thus, for functional and ecological reasons energy awareness and energy-aware operation are fundamental demands for any system. In recent years, a new research domain was established as an interdisciplinary field among different areas of computer science (e.g., operating systems and computer networks) and electrical engineering (e.g., wireless communication and chip design). Based on findings in the field of energy-aware systems and methods, novel application scenarios can be envisioned encompassing even stronger requirements on reliability, resilience, lifetime, adaptability, and self-organization.

This workshop aims to provide a forum to discuss recent results in the field of energy-awareness that is a cross-cutting concern in many areas in systems research. Based on intensive discussions of energy-critical issues in the different layers and the different approaches to energy-aware system design, the participants will be able to study energy-related problems from multiple perspectives and to look into the complex interactions among those layers. We especially encourage PhD students to participate, to share their ideas and findings, and to network with other fellows working in the same field.

Topics of interest

Whereas the workshop mainly focuses on energy-aware systems and methods, contributions are favored that span all the related fields of study. This includes the following aspects:

- Operating system support
- Communication methods
- Protocol engineering
- Simulation techniques
- Cross-layer design of energy-aware systems
- Application and hardware support for energy-aware operation

Organization

The workshop is organized as a follow-up to the successful "GI/ITG Fachgespräch" on energy-aware systems and methods. Key organizers are Prof. Dr. Frank Bellosa (Karlsruhe Institute of Technology), PD Dr. Falko Dressler (University of Erlangen), and Prof. Dr. Dirk Timmermann (University of Rostock).

Important dates

- **January 12, 2010 (extended):** Paper submission deadline. Papers must be submitted in PDF format.
- January 15, 2010: Notification of acceptance
- January 20, 2010: Final paper submission
- February 22/23, 2010: Workshop

Submissions

Submission of both technical papers and position papers is encouraged. Papers should contain original material and not be previously published, or currently submitted for consideration else-where.

Page limit for accepted papers (in English) is 10 pages; the submission of short papers is also encouraged. Accepted papers will be published at the VDE publishing house, and will go to IEEE library (pending), and will also receive an ISBN number.

