Call for Papers

Complementing the topics of ACM SenSys 2023, this workshop will bring researchers together to explore the challenges, issues, and opportunities in the research, design, and engineering of energy-harvesting, energy-neutral and intermittent sensing systems. These are enabling technologies for future applications in smart energy, transportation, environmental monitoring, and smart cities. Innovative solutions in hardware for energy scavenging, adaptive algorithms, and power management policies are needed to enable either uninterrupted or intermittent operation.

High-quality technical articles are solicited, describing advances in sensing systems powered by energy harvesting, as well as those which describe practical deployments and implementation experiences. ENSsys also offers a platform for innovative future directions by soliciting position papers.

Topics of interest include, but are not limited to, the following:

- Power management concepts, algorithms, and circuits for energy-harvesting sensing systems
- Hardware and software concepts, algorithms, and circuits for intermittent computing
- Middleware and services supporting interoperability between zero-energy networks
- Resource management and operating system support for energy-harvesting sensing systems
- Network-wide distributed energy management (e.g., routing, adaptive duty cycling, etc.)
- Artificial intelligence for battery-free systems
- Communication in intermittent-power domain
- Online measurement of energy intake and consumption
- Predicting energy intake and consumption
- Ensuring reliable operation in energy-harvesting sensor systems
- Modelling, simulation, and tools for effective design of future energy harvesting sensing systems
- Architectures and standards for energy-neutral, power-neutral, or intermittent sensing systems
- Internet of (battery-less) Things
- Experience with real-world deployments and innovative applications

Important Dates
- Submission: September 8, 2023
- Notification: October 6, 2023
- Camera Ready: October 20, 2023
- Workshop: November 12, 2023

Organizing Committee
- General Chair: Sebastian Bader; Mid Sweden University; Sweden
- Bashima Islam; Worcester Polytechnic Institute; USA
- Program Chair: Domenico Balsamo; Newcastle University; UK
- Web Chair: Geoff Merrett; University of Southampton; UK

Steering Committee
- Geoff Merrett; University of Southampton; UK
- Bernd-Christian Renner; Hamburg University of Technology; Germany
- Jacob Sorber; Clemson University; USA
- Brandon Lucia, Carnegie Mellon University, USA
- Przemysław Pawelczak; TU Delft; The Netherlands
- Josiah Hester; Northwestern University; USA
- Alex Weddell; University of Southampton; UK

Submission Guidelines

We are soliciting four types of submission: technical papers (up to 6 pages, plus references), position papers (up to 3 pages), poster papers (up to 2 pages), and demo papers (up to 2 pages). Papers should be submitted for consideration via the workshop website prior to the submission deadline. Papers must adhere to the formatting guidelines (templates are available from the workshop website) and will undergo a double-blind review. They will be reviewed for novelty, relevance, and quality. Accepted submissions will be available on the ACM Digital Library at least one week before the conference.

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