

# ENSsys 2022

in conjunction with ACM SenSys

6th November 2022 — Boston, USA

## 10<sup>th</sup> Int'l Workshop on Energy Harvesting & Energy-Neutral Sensing Systems

### CALL FOR PAPERS

Complementing the topics of SenSys 2022, 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.

#### IMPORTANT DATES

Submission: September 5, 2022  
Notification: October 3, 2022  
Camera Ready: October 17, 2022  
Workshop: November 6, 2022

#### ORGANIZING COMMITTEE

General Chair: Sebastian Bader; Mid Sweden University; Sweden  
Program Chair: Bashima Islam; Worcester Polytechnic Institute; USA  
Demo Chair: Michele Magno; ETH Zurich; Switzerland  
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 Pawełczak; TU Delft; The Netherlands  
Josiah Hester; Northwestern University; USA  
Alex Weddell; University of Southampton; UK

#### TECHNICAL PROGRAM COMMITTEE

Mo Alloulah, Nokia Bell Labs, USA  
Noman Bashir, University of Massachusetts Amherst, USA  
Brad Campbell, University of Virginia, USA  
Henry Duwe, Iowa State University, USA  
Ashkay Gadre, University of Washington, USA  
Jeremy Gummeson, University of Massachusetts Amherst, USA  
Matthew Hicks, Virginia Tech, USA  
Polly Huang, National Taiwan University, Taiwan  
Tianxing Li, Michigan State University, USA  
Luca Mottola, Politecnico di Milano, Italy, and RI.Se SICS, Sweden  
Shijia Pan, Carnegie Mellon University, USA  
Vaishnavi Ranganathan, Microsoft Research, USA  
Olivier Sentieys, University of Rennes, France  
Elahé Soltanaghahi, University of Illinois Urbana-Champaign, USA  
Mahmoud Wagih, University of Glasgow, UK  
Lars Wolf, TU Braunschweig, Germany  
Matthias Wählisch, Freie Universität Berlin, Germany  
Kasim Sinan Yıldırım; University of Trento, Italy  
Matteo Zella, University Duisburg-Essen, Germany

#### WORKSHOP SCOPE

Topics of interest include, but are not limited to:

- 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.)
- 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

#### 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 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.

[www.enssys.org](http://www.enssys.org)