# ENSsys 2019

in conjunction with ACM SenSys

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

November 10, 2019 New York, NY, USA

# **CALL FOR PAPERS**

ENSsys will be held in New York City, USA, co-located with ACM SenSys. Complementing the topics of SenSys 2019, 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. Moreover, ENSsys offers a platform for innovative future directions by soliciting position papers.

#### **IMPORTANT DATES**

Submission: August 16, 2019 (23:59 AOE)

Notification: September 6, 2019 Camera Ready: September 20, 2019 Workshop: November 10, 2019

#### **ORGANIZING COMMITTEE**

General Chairs: Christian Renner, TUHH, Germany

Brandon Lucia, Carnegie Mellon University, USA

Program Chairs: Josiah Hester, Northwestern University, USA Alex Weddell, University of Southampton, UK

Geoff Merrett, University of Southampton, UK

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Brandon Lucia, Carnegie Mellon University, USA Geoff Merrett, University of Southampton, UK Przemyslaw Pawelczak, TU Delft, The Netherlands

Christian Renner, TUHH, Germany Jacob Sorber, Clemson University, USA

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Shijia Pan, Carnegie Mellon University, USA

Joshua San Miguel, University of Wisconsin-Madison, USA

Olivier Sentieys, University of Rennes, France Lars Wolf, TU Braunschweig, 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 solicit three types of paper submission: technical papers (up to 6 pages), position papers (up to 3 pages) and demo/poster papers (up to 2 pages). Papers should be submitted for consideration via the workshop website, prior to the submission deadline. Papers should adhere to the formatting guidelines; templates are available from the workshop website. Papers will undergo double-blind review, and 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.