

BuildSys 2017

November 8-9, 2017
Delft, The Netherlands

The 4th ACM International Conference on Systems for Energy-Efficient Built Environments
<http://buildsys.acm.org/2017>

Co-located with ACM SenSys 2017

Preliminary Call for Papers

The 4th International Conference on Systems for Energy-Efficient Built Environments (BuildSys'17) is a leading, single-track, annual forum on research in the areas of intelligent systems and applications for the built environment. BuildSys particularly emphasizes approaches that improve energy efficiency, reduce costs, increase performance, and add novel functionality for improving users' comfort and experience. BuildSys' scope is broad, encompassing all systems within the built environment of the urban fabric, including not only buildings but also critical infrastructure systems, such as water, power, lighting, communications, and transportation that will support the "smart cities" of the future.

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Submission Guidelines

We solicit two types of original papers:

- Regular papers for oral presentation (10 pages)
- Notes papers for oral presentation (4 pages)

Notes papers are 4-page papers intended to discuss preliminary research results, advocate new research directions, describe public software or datasets, or present short projects that do not warrant a 10-page paper.

Key Dates

Abstract Registration: June 9, 2017 (11:59 PM AoE)
Submission Deadline: June 16, 2017 (11:59 PM AoE)
Acceptance Notification: August 18, 2017
Camera-Ready Deadline: September, 2017
Conference Dates: November 8-9, 2017

BuildSys is the premier conference for both researchers and practitioners working to develop and optimize smart infrastructure systems that are driven by sophisticated sensing, computing, and control functions. Papers are invited in all emerging aspects of information-driven systems for the built environment. Topics of interest include but are not limited to the following:

Topics covered include, but are not limited to:

- Applications in smart and connected communities;
- Sensing and control for urban infrastructure systems;
- Novel sensor methodologies, techniques, and tools;
- Sensing and control of electrical, gas, and water loads;
- Improved user interfaces to built infrastructure;
- Modeling, simulation, optimization, and control of heating, cooling, lighting, ventilation, water usage and other resource flows in built environments;
- Sensor systems and applications that enhance energy efficiency, energy reliability, durability and comfort;
- Systems that integrate infrastructure with the smart grid to offer demand response and ancillary services;
- Distributed generation, alternative energy, renewable sources, and energy storage in buildings;
- Emerging standards for data collection, energy control, or interoperability of disparate devices or systems;
- Sensing, modeling, and predicting the urban heartbeat including sounds, movements, and radio spectrum;
- Human in the loop sensing and control for efficient usage of electricity, gas, heating, water;
- Sensor systems for reliable occupancy counting;
- Long-lived and energy harvesting sensor systems;
- Scalable indoor localization and contextual computing;
- Security, privacy, safety, and reliability in built systems;
- Empirical studies of city-scale wireless communications.