

Built environments and critical urban infrastructures, account for over half of society's energy consumption and are the mainstay of our nation's economy, security, and health. Advances in the effective integration of networked sensors, building controls, and physical infrastructure are transforming our society. In the information age, unprecedented research of cyber physical infrastructures includes: the acquisition, integration, and analysis of big and heterogeneous data such as sensors, devices, vehicles, buildings, and human, to tackle the major issues that cities face, e.g., air pollution, increased energy consumption and traffic congestion.

Systems optimization, data analysis and modeling applied to the built environment are particularly important in improving our society, e.g., by increasing its sustainability and enhancing people's quality-of-life. These systems represent the foundation for emerging "smart cities".

The 9th ACM International Conference on Systems for Built Environments (BuildSys'22) will be held November 2022 in Boston, USA.

BuildSys is the premier conference for researchers and practitioners working to develop and optimize smart infrastructure systems that are driven by sophisticated sensing, computing, and control functions. We invite original contributions including, but not limited to the following:

- Applications in smart and connected communities;
- Modeling and simulation, learning, optimization, and control in built environments;
- Reliable and scalable occupant information inference in built environments;
- Emerging standards for data collection, energy control, or interoperability of disparate devices or systems;
- Building automation system metadata models and inference techniques;
- Improved user interfaces to built infrastructure;
- Human in the loop sensing and control for efficient building energy systems;
- Enhancing energy efficiency, energy reliability, durability and comfort via Cyber-Physical Systems and Internet of Things;
- Application of reinforcement learning for built environment;
- Sensing, modeling and predicting for urban infrastructure and transportation;
- Integration of smart grids with built environments;
- Distributed generation, alternative energy, renewable sources, and energy storage in buildings;
- Long-lived and energy harvesting sensor systems;
- Security, privacy, safety, and reliability in the context of built environment;

This year, we are in particular interested in

- Smart building and city technologies and initiatives in developing countries
- COVID impact and response in smart buildings and cities

#### Important Dates

- Abstract Registration: July 8th, 2022, Friday
- Submission Deadline: July 15th, 2022, Friday
- Acceptance Notification: September 2nd, 2022
- Conference: November, 2022