

Special session on Data-Driven Smart Buildings

Overview

The digital revolution and advancements in cyber-physical systems offer significant potential for improving energy efficiency in smart buildings. Data-driven technologies, such as the Internet of Things (IoT), artificial intelligence, and data analytics, can optimize the control and operation of building HVAC systems. However, the full potential of digitalization in smart buildings has yet to be realized. This special session delves into the opportunities and challenges of implementing data-driven technologies in smart buildings, exploring innovative approaches, emerging business models, and strategies to overcome barriers to digitalization.

The session will be held in Unicamp, São Paulo (Brazil) as part of the [Energy Informatics Academy Conference 2023](#) (EI.A 2023).

Organized by: [IEA EBC - Annex 81 - Data-Driven Smart Buildings](#)

Topics

- IoT implementation in smart buildings for data collection and real-time monitoring
- Artificial intelligence and data analytics for predictive management and energy performance assessment
- Novel platforms and business models for energy efficiency software services
- Open data concepts to stimulate innovation and reduce barriers to energy efficiency software services
- Case studies showcasing the successful application of data-driven technologies in smart buildings
- Control-oriented building modeling frameworks for assessing the impact of alternative HVAC control strategies
- Data security, privacy, and ownership challenges in data-driven smart buildings
- Other Data-Driven Smart Buildings related topics

Organizing Committee

Stephen White (CSIRO - Australia's National Science Agency, Germany)

Bo Nørregaard Jørgensen (University of Southern Denmark, Denmark)

Esther Borkowski (Institute of Technology in Architecture, ETH Zurich, Switzerland.)

Etienne Saloux (Natural Resources Canada, Canada)

Patrick So (Electrical and Mechanical Services Department, Hong Kong, China)

Important Dates

- Paper submission deadline: **July 16, 2023**
- Notification of acceptance: August 21, 2023
- Conference dates: December 6-8, 2023
- Camera-ready paper due: September 15, 2023
- Registration deadline: October 6, 2023

Please check the conference webpage for the details: <https://www.energyinformatics.academy/eia-2023-conference>