ACM BuildSys'19 | Columbia University, New York, NY | November 10, 2019

## **UrbSys'19-International Workshop**

Urban building energy sensing, controls, big data analysis, and visualization (UrbSys)

## Workshop Agenda Workshop Chairs: Ravi Srinivasan, Mahabir Bhandari

8:30 AM

Welcome: Ravi Srinivasan 9:00 AM

Introducing Plenary Speaker: Mahabir Bhandari 9:05 AM

Plenary Speaker: Teja Kuruganti, Oak Ridge National Laboratory 9:10 AM

Lightning Round: 9:30 AM

Visualizing Urban Microclimate and Quantifying its Impact on Building Energy Use in San Francisco

Tianzhen Hong (LBNL); Yujie Xu (CMU); Kaiyu Sun, Wanni Zhang, Xuan Luo (LBNL) Advanced Daylight Admission Systems Using Auxetic Structures in Florida, USA

Ryan Sharston (University of Florida)

Engineering-type vs. Ambient-type: quantifying effects, different data visualizations on energy consumption
Lucas Spangher, Akaash Tawade, Alex Devonport, Costas Spanos (University of California at Berkeley)
Evaluating the Feasibility of Reusing Pre-trained Thermal Models in the Residential Sector
Md Monir Hossain, Tianyu Zhang, Omid Ardakanian (University of Alberta)
Differentially Private Smart Metering: Implementation, Analytics, and Billing
Matthew Hale, Prabir Barooah, Kendall Parker, Kasra Yazdani (University of Florida)
Building Energy Use Prediction Owing to Climate Change: A Case Study of a University Campus
Haekyung Im Payi Sriniyasan, Sobeil Eath, (University of Florida)

Haekyung Im, Ravi Srinivasan, Soheil Fathi (University of Florida)

**Estimating Whole Building Occupancy from Transportation Simulations** 

Ralph Muehleisen, Qi Li (Argonne National Laboratory)

Quantification of energy cost savings through optimization and control of appliances within smart neighborhood homes
Supriya Chinthavali, Varisara Tansakul, Sangkuen Lee (ORNL); Anika Tabassum (Virginia Tech); Jeff Munk (ORNL); Jas Jakowski (University of Tennessee); Michael Starke, Heather Buckberry (ORNL); Jim Leverette

(Southern Company)

Discerning Occupant Psychosocial Behaviour in Smart Built Environment and its Design

Tarun Kumar, Monto Mani (CPDM & CST, Indian Institute of Science, Bangalore, India)

Acquisition of Typical Occupancy Schedules for Commercial Buildings from Social Networks

Xing Lu, Fan Feng, Zheng O'Neill (University of Alabama)

Potential Demand Reduction from Buildings in a Simulated Utility

Brett Bass (The University of Tennessee); Joshua New (Oak Ridge National Laboratory)

Can Infrared Facial Thermography Disclose Mental Workload in Indoor Thermal Environments?

Xi Wang, Da Li, Carol C. Menassa, Vineet R. Kamat (University of Michigan)

Evaluation of the Need for and Design of a City Energy Operations System

Mary Ann Piette, Reshma Singh, Anand Krishnan Prakash (Lawrence Berkeley National Lab)

10:30 AM

Discussion #1: Where are we at? What's missing?; Joshua New 10:45 AM

10:55 AM Breakout Session

11:20 AM Share Perspectives

12:00 PM Lunch Break

01:15 PM Introducing Plenary Speaker: Mahabir Bhandari

Plenary Speaker: Mary Ann Piette, Lawrence Berkeley National Laboratory 01:20 PM

01:40 PM Introducing Plenary Speaker: Ravi Srinivasan

Plenary Speaker: Carol Menassa, University of Michigan 01:45 PM

02:05 PM Discussion #2: What do we want to achieve by 2030?; Ravi Srinivasan

02:15 PM Breakout Session

02:30 PM Share Perspectives

02:55 PM Wrap up; Mahabir Bhandari

03:00 PM End of Workshop





