UC Irvine
Department of Civil and Environmental Engineering

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SEMINAR
Series

Can cities keep up with a changing climate? Projecting urban water and electricity demand via machine learning.

Presented by:

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Friday, February 6, 3:00 PM - 4:20 PM PT
McDonnell Douglas Auditorium (MDEA)

Abstract: Urban systems are interconnected on every level—from the physical and cyber infrastructure networks, such as roads, the power grid, and water pipes, to the supply and consumption of services, such as water, electricity, and mobility. Focusing on water and electricity systems, this talk will discuss a methodological framework to evaluate the impacts of climate change on the water-electricity demand nexus. In particular, the framework leverages machine learning to simultaneously project the coupled water and electricity demand as a function of the climatic conditions. The results of this work can be used to facilitate more proactive resilience planning.

Bio: Dr. Renee Obringer is an assistant professor in the Department of Energy and Mineral Engineering at Pennsylvania State University, as well as a Research Fellow of Urban and Interdependent Infrastructure Systems at the United Nations University Institute for Water, Environment, and Health. Her research interests focus on understanding and evaluating the impact of climate change on urban infrastructure systems. Prior to starting her role at Penn State, Renee worked as a postdoctoral researcher at the University of Maryland. She earned her PhD in environmental and ecological engineering from Purdue University.

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Join us after the seminar for a reception hosted by

Civil and Environmental Engineering Graduate Association

CEEGA
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Students, researchers, faculty & guests are invited

Located at Engineering Hall EH-2430 Colloquia Patio

Contact CEEGA@uci.edu