LSGI & RILS RESEARCH SEMINAR

Applications of Machine Learning in Climate Change and Environmental Modeling

7 AUG 2025 (THU)
11:00 AM - 12:00 PM
Y303, POLYU
ENGLISH

Dr. Zhong LI
Associate Professor
Department of Civil Engineering
McMaster University, Canada

ABSTRACT

This talk will provide an overview of past and ongoing research in Dr. Zoe Li's research team at the Department of Civil Engineering, McMaster University, Canada. Dr. Li's research focuses on environmental risk analysis and management, where she introduces new uncertainty quantification methods for climate-hydrological and environmental modeling and develops robust optimization tools to support risk analysis and management. With a focus on how to leverage machine learning techniques to solve environmental problems, Dr. Li will present several applications of machine learning for climate downscaling, hydrological forecasting, river ice prediction, and wastewater modeling.

BIOGRAPHY

Dr. Li is an Associate Professor and University Scholar in the Department of Civil Engineering at McMaster University, Canada. She has published 88 peer-reviewed journal articles, and her team has attracted over CAD $13 million in funding. Her methodologies for hybrid physics- and data-driven modeling, probabilistic prediction, and integrative systems optimization have been adopted by a wide range of end users, including municipal wastewater treatment plants, world-leading environmental services and infrastructure companies and Indigenous communities.

Moderator: Prof. Shuo WANG, LSGI

All are welcome! Please register now to join us on-site!

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