Seminar by,
Dr. Venkatesh Merwade

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Water Resources Management using Data, Computational Modeling and Cyberinfrastructure

Abstract

Addressing the grand challenges associated with growing population, food and water security, frequently occurring natural disasters, and changing climate require not only domain expertise, but also computational expertise to deal with big data analytics and simulations. This talk will provide an overview of how geospatial data, computational modeling and cyberinfrastructure can be used to address sustainable water resources problems. Specifically, case studies involving available of green and blue water in the Ohio River Basin, USA, water resources availability in Kenya, and flood modeling in Indiana and Texas, USA will be presented. The talk will conclude with an overview of some ongoing work related to the use of cyberinfrastructure and data driven approaches for addressing issues related to river and flooding.

Biosketch

Dr. Merwade is Professor pf Civil Engineering with joint appointment in Agricultural and Biological Engineering at Purdue University since 2007. Prior to that he conducted his postdoctoral research, and served as Lecturer at UT Austin and Purdue University. He received his bachelor's degree in environmental engineering from Shivaji University in India, MSc in Engineering Hydrology from National University of Ireland, and PhD from UT Austin in 2004. Dr. Merwade's broader research interests are in the area of surface water hydrology with specific focus on flood related processes as well as GIS applications in water resources engineering with specific focus on river channels; surface water hydrology; river hydraulics; cyberinfrastructure for hydrology; water in developing world.

Date: Friday November 11th, 2022
Time: 4:00 – 4:50 PM
Zoom Meeting ID: 971 1830 2584

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