The Department of Civil and Environmental Engineering at the University of Houston presents...

CIVE 6111 Graduate Seminar

Texas Integrated Flooding Framework Planning Project:From Redundancy to Synergy

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Friday, September 16, 2022
2:45pm-3:45pm
Zoom: https://uh-edu-cougarnet.zoom.us/j/95702511696?
pwd=VFIybkh4emhETHNlTGV0dXRHS3pIZz09

Abstract

The Texas Integrated Flooding Framework (TIFF) is pioneering a new collaborative effort to address compound flooding impacts in Texas by leveraging expertise and resources to bring about the best information to enhance coastal flood risk planning and mitigation. TIFF seeks to continually gather and discern the best available information on coastal flooding and make recommendations to stakeholders on how the current procedures in data gathering/collection, data management/visualization, modeling, planning, and outreach could be improved (e.g., spatially, temporally, technologically, periodically, and fundamentally). These science-based recommendations will focus on the needs of the communities (both experts and the general public) to improve flood risk planning and mitigation. Most importantly, TIFF is building relationships between state, federal and local authorities to create a network of experts that can address future flood related problems while providing sound, reliable recommendations that will meet the current needs of our coastal stakeholders. The TIFF planning project, funded by the Texas General Land Office, captures the best available (and needed) flood science data into a framework with the goal of enhancing flood risk planning and mitigation efforts for a more resilient Texas coast.

Bio

Dr. Amin Kiaghadi earned his Ph.D. in Environmental Engineering from the University of Houston (UH) in 2018 and his Masters in Water Resources (2013) and Bachelors in Civil Engineering (2010) both from the University of Tehran. After finishing his doctoral research, and before joining TWDB, Dr. Kiaghadi spent two years a joint-appointed postdoctoral fellow at the Oden Institute for Computational Engineering and Sciences at the University of Texas at Austin and the Department of Civil and Environmental Engineering at UH under the mentorship of Dr. Clint Dawson and Dr. Hanadi Rifai, respectively. Dr. Kiaghadi is currently a coastal modeling team lead at the TWDB where he is working with various modelers, scientists, and engineers. He is also the project manager for the Texas Integrated Flooding Framework (TIFF), a planning project funded by the GLO and led by TWDB, USGS, and USACE-Galveston District. His research interests include geospatial modeling and machine learning for coastal resiliency, hurricane storm surge simulation, rainfall-induced flooding, fate and transport of pollutants in the environment, water and sediment quality, and the water-energy nexus.