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Best of Water Systems Research

Dr. Grey Nearing

Assistant Professor of Environmental Data Science, University of California Davis, Visiting Researcher at Google Research.

Machine Learning in Hydrology

Wednesday, September 08, 2021 | 6 – 7 pm PKT

Abstract: Machine Learning (ML) applications in the hydrological sciences have accelerated rapidly in the past 3 years. I will give a brief overview of some of these applications that point toward what I see as a larger shift in focus within the community. This talk will cover technical details on applications of streamflow forecasting in particular, as well as results from other aspects of terrestrial modeling, including surface energy partitioning and carbon flux modeling (net ecosystem exchange). I will discuss briefly the state of physics-informed ML in the discipline and hypothesize what types of hybrid (physics + ML) applications we might see in the near future.

Moderated by Talha Manzoor, Assistant Professor, Centre for Water Informatics & Technology (LUMS)

Speaker Biography: Dr Grey Nearing is an Assistant Professor of Environmental Data Science at the University of California Davis, and a Visiting Researcher at Google Research. He was previously a member of hydrology modeling teams at NASA and the US National Center for Atmospheric Research (NCAR). Dr. Nearing's research is focused primarily on machine learning in hydrology and land surface modeling.

The webinar can be attended via Zoom. In order to attend, the participants must register at the following link:
https://wit.lums.edu.pk/BWSR2021
Instructions to log into the webinar will be sent via email.

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