Nishant Kumar

Phd, Civil Enginnering

India, 27 years old

3801 Baldwin Ave, Lincoln, USA

+1 4023015028

nkumar4@huskers.unl.edu

Skills

Hydrology

Experienced

Machine Learning

Experienced

Research

Experienced

Data Analysis

Experienced

Statistical Analysis

Experienced

Python

Experienced

Matlab

Experienced

R

Experienced

High performance computing

Experienced

Links

github

Linkedin

I am working on Floods and Droughts, apllication of machine learning in hydrology, and Nonstationarity.

Education

Sep 2022 - Jun 2026

Ph.D. Civil Engineering

University of Nebraska-Lincoln at Lincoln, US

Advisor: Prof. Tirthankar Roy

Jul 2022

MTech, Civil Engineering

Indian Institute of Science at India

Advisor: Prof. D. Nagesh Kumar

Jul 2020

BE, Civil Engineering

Jadavpur University at India

Additional information

Honors & Awards

Graduate Student Travel Awards 2023

NWEA Student Scholarship

Publications

• A Machine Learning-based Probabilistic Approach for Irrigation Scheduling, Water Resources Management (2024)

Languages

English

Highly proficient

Bengali

Highly proficient

Hindi

Native

Hobbies

- Cricket
- Swimming
- Volleyball

• Trends and Causal Structures of Rain-on-Snow Flooding, Journal of Hydrology (under review)

Current Project

Enhancing the Hydrological Drought Monitoring Capability of the US Drought Monitor funded by NASA

Conferences

•Kumar*, N., K. K. Kar*, S. Srivastava*, S. Rasiya Koya*, S. Pokharel*, M. Likins*, and T. Roy (2023), Causal Discovery Methods to Investigate Rain-on-Snow Flooding, *AGU Fall Meeting*, Dec 11-15, San Francisco.

•Kumar, N., K. K. Kar, and T. Roy (2023), Trend for rain-on-snow events across North America, *Nebraska Water Conference*, Oct 3-4, Omaha.

•Roy, T., S. Rasiya Koya, S. Pokharel, N. Kumar, S. Srivastava, K. K. Kar, and I. Kim (2023), Convergent research towards building flood resilience in Nebraska, *Nebraska Water Conference*, Oct 3-4, Omaha.

•Blackwell, B., S. Rasiya Koya, N. Kumar, and T. Roy (2023), Causal Drivers of FloodInduced Water Quality Issues in Nebraska, *Nebraska Summer Research Program Symposium*, Aug 3, Lincoln.

•Kumar, N., D. N. Kumar, and T. Roy (2023), Spatiotemporal analysis and modeling of non-stationarity in hydrological time series, *EGU General Assembly*, Apr 24–28, Vienna.

•Srivastava, S., N. Kumar, A. Malakar, S. Das Choudhury, C. Ray, and T. Roy (2023), An ML-based Probabilistic Approach for Irrigation Scheduling, *EGU General Assembly*, Apr 23-28, Vienna.

Mentoring

- Mentored an under graduate student in summer 2023.
- Mentoring a graduate student in summer 2025.