



## Chirag Kumar

Ph.D. Student in Environment and Resources, admitted Autumn 2025

### Bio

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#### BIO

Chirag Kumar combines next-generation modeling tools with on-the-ground field research to provide actionable strategies that improve human health amidst environmental and migratory uncertainty. He is interested in causally unraveling the environmental factors driving infectious diseases to inform targeted interventions that mitigate those threats and how those insights can be directly shared with the public to empower individual-level change. To unravel complex human-environment-health systems, he has conducted on-the-ground field work and mechanistic biological analyses to provide key inputs into his models. His findings have been used to advocate for new World Health Organization vaccine recommendations against antimicrobial-resistant pathogens. Chirag previously served as a Biden-Harris US Digital Corps Data Fellow at the US CDC's Center for Forecasting and Outbreak Analytics and on the Biden administration's White House AI Forum. He graduated from Princeton University as a Smith-Newton Environmental Research Scholar where he concentrated in chemistry with minors in applied math, global health, and quantitative biology. He is supported by a National Science Foundation Graduate Research Fellowship.