



Katie Wu

- Ph.D. Student in Environment and Resources, admitted Autumn 2022
- Ph.D. Minor, Civil and Environmental Engineering

Bio

BIO

Katie's research explores how community-driven social interventions and infrastructure development impact community and climate resilience in informal settlements. Her work advances how we operationalize resilience to better inform community-based strategies, policy, and investments that support urban transformation for vulnerable populations. She incorporates participatory methods essential for driving community-led efforts, ensuring a community's deep participation in every step of the iterative analysis, planning, and decision-making processes, in collaboration with multi-sectoral partners and decision-makers. Katie integrates advanced data science techniques, including network science and graph neural networks (GNNs), with community-generated, ground-truthed data to redefine how resilience is measured and applied for more equitable, community-driven strategies for sustainable development. She uses unconventional data sources, such as satellite imagery and citizen-sourced data, to model the built and natural environment in areas with limited conventional data.

Prior to Stanford, Katie studied data science and AI for Product Innovation at Duke University, where she obtained a Master of Engineering Management (MEM). She was a Sustainability Graduate Intern at Lyft, Inc., where she completed and rebuilt their 2020 Greenhouse Gas (GHG) Inventory and Report and designed an air quality model forecasting potential health benefits of EV adoption for underserved communities. She received an M.S. in Medical Science from the University of Colorado School of Medicine and a B.S. in Animal Science with Distinction in Research from Cornell University. Katie is a Dean's Graduate Scholar in the Doerr School of Sustainability, an Emerson Consequential Scholar with the Stanford Technology Ventures Program (STVP), a Graduate Fellow at the Stanford Institute for Human-Centered AI (HAI), and a Stanford Dalai Lama Fellow.

EDUCATION AND CERTIFICATIONS

- M.S., Duke University , Engineering Management
- M.S., University of Colorado School of Medicine , Medical Science
- B.S., Cornell University , Animal Science, Pre-Medical Studies

LINKS

- LinkedIn: <https://www.linkedin.com/in/katiewu24/>
- Personal Webpage: <https://kjh58.github.io/katiewu/>