THE
NEW
SCHOOL

**URBAN
SYSTEMS
LAB**

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urbansystemslab.com/opportunities

# Senior Research Fellow in Urban Flood Modeling

## Overview

**The New School's Urban Systems Lab is seeking an outstanding scholar with expertise in hydrological modeling, flood risk, and spatial modeling to work with diverse local and global databases to analyze and communicate urban climate change risks.** The Fellow will be part of our Google.org funded project, *ClimateIQ,* an AI driven integrated climate risk modeling environment and data visualization tool that provides near term and future flood risk data in urban areas, as well as contribute to our Kresge Foundation supported urban flood equity research as part of their Climate Resilient and Equitable Water Systems program. The Fellow will work closely with the Lab's Director to advance hydrological modeling in urban areas, coordinate and communicate outputs and analysis, and work with a team of climate modelers to validate data and processes. This includes collaborations with Stockholm Resilience Centre, Climasens, and other Lab partners in a global research network. The fellow will work with a diverse team of climate scientists, researchers and modelers leveraging cutting edge technologies and data science to improve planning and urban climate adaptation across the world. This is a 3-year fixed term, full-time, benefits eligible position with the possibility of renewal or extension contingent on funding.

## Responsibilities

1. Work with the Lab director and research teams to conduct hydrological modeling and flood risk modeling.
2. Contribute to active research initiatives including Google.org funded project ClimateIQ, to help develop an integrated climate risk modeling environment and data visualization tool that provides near term and future flood risk data in urban areas.

3.  Assist with flood risk modeling as part of the Kresge Foundation's Climate Resilient and Equitable Water Systems initiative to better understand the environmental justice impacts of climate change related flooding on disadvantaged communities.
4.  Run relevant hydrological modeling for multiple cities and assist with spatial vulnerability analysis to inform climate adaptation planning and policy.
5.  Participate in an ongoing research program in the Urban Systems Lab at The New School and develop work based on their interest and expertise with faculty at The New School and with external colleagues on the project.
6.  Collaborate with the Lab's cutting-edge data visualization team as well as a community of research technicians and scholars.

## Minimum Qualifications

- Expertise in urban flood modeling especially hydrological and hydraulic modeling
- Geospatial analytical skills including in ArcGIS and related software, Python, R, or other relevant coding languages and libraries
- Familiarity with urban resilience, climate change, and complex urban systems
- Capability to communicating research methods and results to non-academic audiences
- Experience conducting multi-disciplinary research;
- Willingness and ability to work as part of a multi- and transdisciplinary team - collaboration
- Comfort working in GitHub and related version control and collaboration tools
- Strong evidence of excellent organization, communication, presentation and writing skills including academic and other outputs in the form of scientific publications
- Ability to adhere to the University's Covid-19 policy and requirements

## Apply

To apply please prepare a cover letter, curriculum vitae, and names and contact information of three references. Applications must be submitted online via The New School's careers page.

## Click Here to Apply