

# Catherine Achukwu

## Full-Stack Software Developer & Environmental Engineer

### Experience

7 years

### Education

Bachelor of Engineering, Environmental Engineering Technology, Georgia Tech, 2014  
Professional Certificate, Full-Stack Web Development, Georgia Tech, 2019

### Affiliations

ASCE

## Summary

Catherine is a software developer and an environmental engineer with a bachelor's degree in Environmental Engineering from Georgia Tech. Her undergraduate research included crowdsourcing water quality using mobile technology and rapid microbiological tests to assess drinking water risks in rural India as well as Field survey of the Samoa Tsunami of 2009. She also worked on urban sustainability including water/energy use efficiency and sustainable biofuels, focusing on algae related biofuel downstream issues. Additionally, she founded Collaborative Homelessness Initiative and Louis Love Nest Foundation, organizations dedicated to encourage underprivileged children to follow their dreams in STEM by offering mentorship and financial aid. Catherine has experience in software development using CSS, HTML and JavaScript. She is also skilled at team leadership, process engineering, project management, hydraulic modeling and GIS

## Relevant Experience

### Woodard & Curran Foundation, Los Angeles, California

*Director and Chair of Giving Committee.* Lead team of 15 in developing plan for evaluating Woodard & Curran Foundation annual impact grant by coordinating team meetings and delegating tasks. Review grant application and interview grant applicants virtually and in person to select the best recipients for \$100,000 grant award.

### Woodard & Curran, Atlanta, Georgia

*Environmental Engineer.* Performed large scale data analysis using Microsoft Excel, Microsoft Access and Matlab. Used GIS and Innovyze software : Infowater to build hydraulic models, organized and calibration water systems, prepare pipe flushing plans, evaluate water lines for upgrades and recommended lines for upgrades. Worked on-site during line upgrades to coordinate with equipment vendors, manage construction and manage client relations. Volunteered as office sustainability coordinator to develop new initiative aimed at improving office sustainability practices.

### Orègh North America Inc., Atlanta, Georgia

*Process Engineer.* Worked as a Process Engineer for an international environmental startup developing innovative solutions to optimize new technology and improve performance by collecting and analyzing process data, authoring operators user manual for new technology as well as SOPs for sample testing. Designed and maintained new lab space for optimization tests and managed daily on-site test. Teamed with marketing department to conduct site visits for potential new clients, wrote client reports, managed daily on-site client relations and maintained an accident free work environment by managing on-site health and safety plans.

### City of Atlanta, Atlanta, Georgia

*Intern.* Authored BMP composition for stormwater. Conducted routine plant maintenance for water filter system. Routinely tested water samples for chlorine, phosphate and turbidity. Tested wastewater samples for total solids, volatile suspended solids, metals, solids, ammonia, carbon dioxide, oil and grease. Revised and updated Standard Operating System, and assisted with maintenance of water filter systems.