

# Sophia Olmeda

New York, NY | sno2112@columbia.edu | (626) 586-5228 | linkedin.com/in/sophiaolmeda2

**Objective:** To obtain an internship in Water Engineering to combine my passions for sustainability and infrastructure

## EDUCATION

**Columbia University** New York, NY  
*Bachelor of Science in Civil Engineering, Minor in Environmental & Sust. Engineering (GPA: 3.59).* Expected May 2024

- Relevant Coursework: Art of Structural Design, Mechanics, Mech. of Solids, Fluid Mech., Earth's Enviro. Systems – Geology, Planning and Mgmt. of Hydrological Systems, Project Mgmt. for Civil Engineers, Social Movements, Better Planet By Design
- Awards: 2<sup>nd</sup> place Microplastic Design Challenge (2021), Dean's List (2020,2021), Named Scholar (2021-2022), Southern California Edison Scholarship Recipient (2020)

## INDUSTRY EXPERIENCE

**EES Materials Process Lab** New York, NY  
Undergraduate Lab Assistant September 2022 - Present

- Performing strength and material performance tests on concrete specimen containing fly and bottom ash replacement to determine a concentration intended for an industrial scale

**ASCE Construction Institute** Charleston, SC  
Student Days Participant July 2022

- Formulated and presented a bid for the expansion of a US-17 highway including estimations, scheduling, project management plans, and responses to addenda addressing minimizing impact to a stream bed adjacent to the roadway
- Earned 1<sup>st</sup> place for our bid alongside my team, "Construction Institute Builders" for the Request for Proposal

**Los Angeles Water Quality Control Board** Los Angeles, CA  
401 Program Intern May 2022 – Present

- Contributing to the review and filing of Clean Water Act Section 401 water quality certifications for basin maintenance, construction of bridges, and over 100-acre housing developments using maps, state guidelines, technical reports, and other related application material

**Engineers Without Borders** New York, NY  
EWB Ghana Water Team & EWB Morocco Water Team, Cabinet Member September 2020 - Present

- Designed water infrastructure to improve water quality and access for more than 2,000 people in Amanfrom, Ghana
- Collaborating with Ghanaian and Moroccan WATSAN communities via surveys to generate O&M manuals
- Mapped spigot paths in EPANET, analyzed water quality data, and used hydrological calculations for filtration modeling

**374Water** Durham, NC (Remote COVID-19)  
Engineering Research Intern June 2021 - August 2021

- Researched and developed an Excel database mapping wastewater infrastructure and market indicators throughout the U.S.
- Generated an international database for water sanitation and clean technology availability

**PCL Construction-Kaiser School of Medicine** Pasadena, CA  
Civil Engineering Intern August 2019

- Coordinated technical meetings and executed expense reports tracking site costs and project budgeting for contractors and engineers for the construction of the Kaiser School of Medicine

## SKILLS & INVOLVEMENT

**Programming Software & Tools:** Python, AutoCAD, EPANET, Microsoft Office Suite (Word, Excel, PowerPoint, Teams), Slack

**Languages:** English, Spanish

**Interests:** Latinx and First-Generation Student empowerment, Travel, Cooking

**Organizations:** Society of Hispanic Professional Engineers, Society of Women Engineers, Multicultural Affairs Board, ASCE