

# Neha Ramanna

Washington, DC • (615) 600-8385 • neharamanna@gwu.edu

## EDUCATION

---

**The George Washington University, School of Engineering and Applied Sciences**  
Bachelor of Science in Civil Engineering  
Concentration in Environmental Engineering

Washington, DC  
May 2023

## EXPERIENCE

---

### **The Farhadi Research Group**

*Undergraduate Research Assistant*

Washington, DC  
May 2022 - Present

- Carry out independent research project on urban heat islands in DC while simultaneously collaborating with PhD students and professor
- Extract temperature data from 12 years of satellite imagery using ArcGIS Pro and apply findings to a prediction model based on AI software
- Presented abstract, methodology, and results at the American Geophysical Union Fall 2022 Conference for peer critique

### **OHM Advisors**

*Engineering Aide*

Nashville, TN  
May 2021 - August 2021

- Conducted stormwater drainage calculations and storm sewer analysis using Civil 3D and HydroCAD necessary for the stormwater and sanitary pipe system design
- Assisted survey team and project engineers with field reconnaissance for two water and sewer design projects by capturing 360° imagery and preparing a photo map consisting of over 150 photos
- Performed research and review of project files containing information on HDPE pipe installations to recommend on future pipe replacements in the district

### **The George Washington University, Dr. Sameh Badie**

*Student Academic Assistant*

Washington, DC  
August 2022 - Present

- Instruct a 9-student Introduction to Structural Theory class each week and prepare lesson plan focused on STAAD pro
- Grade 30+ homework assignments and quizzes per week for Introduction to Structural Theory and Reinforced Concrete Design based on curriculum standards and professor expectations
- Adhered to students' needs to reinforce learning concepts and improve understanding; present progress to the professor

### **Vanderbilt Mechanical Engineering Department, Dr. Cary Pint**

*Research Laboratory Intern*

Nashville, TN  
August 2017 - May 2018

- Assisted in wet-lab research on battery cell creations and alternative ion materials
- Completed a rate-study analysis of a battery's capacity to optimize power and bridge energy density and rate-capability of supercapacitors and traditional lithium-ion batteries
- Co-authored an article with the Principle Investigator based on research findings that was published in the Royal Society of Chemistry's *Journal of Nanoscale*

### **Erno Family**

*Nanny*

Washington, DC  
December 2021 - Present

- Provide quality child care for a family of 2 children [2-3 times per week] in a manner that is respectful of household guidelines
- Transport both children to and from school and plan activities while maintaining communication with the parents
- Contribute to a safe, nurturing, and positive environment where the children are comfortable and stimulated

## SKILLS AND ORGANIZATIONS

---

- AutoCAD; HydroCAD; Civil 3D/Pipenet; MATLAB; ArcGIS Pro; SOLIDWORKS; Bluebeam; Python; Microsoft 365
- Member, American Society of Civil Engineers, GWU, 2021-Present
- Member, Society of Women Engineers, GWU, 2021-Present
- Dancer and Tech Assistant, Student Dance Performance, GWU, 2018-2020