





Najma Akpanoko

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EDUCATION

- **Vanderbilt University** *Expected Graduation: May 2027*
Ph.D. Student in Civil Engineering Nashville, TN
- **The Georgia Institute of Technology** *August 2021*
B.S. in Mechanical Engineering, Graduated with Honors Atlanta, GA
- **Spelman College** *May 2019*
B.S. in Physics, Magna Cum Laude Graduate Atlanta, GA

EXPERIENCE

- **Civil and Infrastructure Systems Engineering Department, Vanderbilt University**  *August 2023 - Present*
Graduate Research Assistant Nashville, TN, USA
 - Utilizing wearable technologies to monitor physiological responses and predict heat stress in construction workers, using electrodermal sensors, heart rate monitors, and temperature sensors.
 - Developing predictive models using Python, MATLAB, and machine learning algorithms to assess heat stress and inform infrastructure design and policy improvements for vulnerable communities.
- **Supply Network Operations, Feminine Care, Procter and Gamble (P&G)**  *August 2021 - July 2023*
Supply Chain Manager, Always Liners - Prior Role: Process Engineer and Conversion Analyst Cincinnati, OH, USA
 - Led supply chain operations for Always Liners across North America, from manufacturing to distribution. Implemented strategies to enhance efficiency, reduce costs, and improve delivery timelines.
 - Orchestrated the reduction of non-performing inventory by \$ 4.68 million through rigorous plant inventory reviews, the creation of a new category inventory run-out strategy approved by leadership, as well as the creation of system automations within the digital inventory management tool.
- **The Johns Hopkins University Applied Physics Laboratory Space Exploration Sector**  *Summer 2021*
Aerospace Systems Engineering Intern Laurel, MD, USA
 - Contributed to Dragonfly, a dual-quadcopter for exploring Saturn's moon Titan, by creating a MATLAB-based weighted array script to distinguish wet from dry surfaces using image data.
 - Conducted edge detection experiments on rock-like materials with varying moisture levels and light wavelengths, enhancing Dragonfly's mass spectrometer for more accurate surface material analysis.
- **Agility Robotics**  *Spring 2021*
Primary Researcher - Black Deep Tech Summit Student Startup Research Project Remote
 - Developed CAD models to reduce foot sole degradation of a humanoid robot by analyzing ankle control, passive compliance, material selection, and rubber sole performance for durability and stability.

COMMUNITY SERVICE EXPERIENCE

- **Graduate Student Council, Civil and Environmental Engineering (CEE) Department** *August 2025 - Present*
Vice President 
 - Coordinating academic, social, and professional development initiatives for over 70 CEE graduate students, organizing research presentations, monthly meetings, and community-building events; supporting student success and well-being while strengthening graduate student representation within the department and broader university community.
- **Habitat for Humanity of Greater Nashville** *September 2024 - Present*
Supervisor on Site (SOS) 
 - Supervising and training 30+ corporate volunteers across multiple Habitat for Humanity build days, leading tasks such as wall framing, truss installation, window installation, and site preparation; guiding volunteers in reading build plans and ensuring safety compliance, contributing to the successful completion of 7+ homes.
- **The Climate Leaders Academy, YEAH Network** *May 2023 - Present*
Sustainable Development Coordinator 
 - Selected for the Climate Leaders Academy under a \$2.5M NSF grant, co-leading a community garden and a year-long climate change program for high school students; working with stakeholders to develop urban greenspaces and presented climate mitigation strategies at COP 28 in Dubai, UAE.

HONORS AND AWARDS

- **Dwight D. Eisenhower Transportation Fellow - U.S. Department of Transportation** *November 2024 - Present*
- **Bill Anderson Fund (BAF) Fellow** *September 2024 - Present*
- **LEED Green Associate Certification** *May 2024 - Present*
- **Provost's Graduate Fellowship - Vanderbilt University** *August 2023 - Present*