

## EDUCATION

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Rowan University, The Henry M. Rowan College of Engineering  
Bachelor of Science, Civil and Environmental Engineering  
GPA: 3.489

Glassboro, NJ  
Expected May 2023

**Certifications & Awards:** Dean's List Fall '19, '21, '22 & Spring '21, '22, Gold Certificate for Leadership Program, Accredited Bentley Microstation User, Erosion and Sediment Control Plan No. RPC023306, Nuclear Gauge Certified

## WORK EXPERIENCE

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### Johnson Mirmiran & Thompson

Newark, DE

#### Highway Design Intern

May 2022 – August 2022

- Utilized Microstation, OpenRoads, ProjectWise, BlueBeam and SharePoint to assist in all phases of design for various DelDOT capital and internal JMT projects across northern Delaware
- Coordinated directly with team members across various departments to submit work for 5 different projects before deadlines
- Performed site visits to collect and confirm survey data such as curb measurements, signage and striping, underground utilities, and utility pole numbers

### Specialized Engineering

Frederick, MD

#### Construction Materials Tester

May 2021 – July 2021

- Traveled to various construction site locations across Maryland, DC, and Virginia performing inspections of soil compaction, concrete sampling, and asphalt compaction
- Ensured construction conformed to specifications on plans following guidelines set by ACI and ASTM standards and submitted daily reports
- Tested cylinders, beams, asphalt, and soil in the laboratory and used a nuclear density gauge, T-probe, slump cone, and air content apparatus
- Communicated with site contractors, agency representatives, other technicians, and project managers

## ENGINEERING PROJECTS

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### Washington State Bridge Design (Spring 2023)

- Calculated the straining actions/load demands on steel and concrete bridge superstructures and substructures
- Designed reinforced concrete beams, one-way slabs, and short columns, according to the provisions of AASHTO-LRFD Ninth Edition and Washington State specific provisions
- Utilized design and analysis software such as PGSuper and Bentley LEAP Bridge

### 3D Printed Bridge Design and Competition (Fall 2022)

- Designed a lightweight, durable, and structurally sound 3D printed bridge using SolidWorks following strict dimension constraints
- Researched and implemented various mechanical connections to withstand vertical loading
- Performed hand calculations such as shear, moment, deflection, and ultimate strength of the bridge

### Design of Rowan University's Engineering Hall - Lead Geotechnical Engineer (Fall 2022)

- Reviewed geology, stratigraphy, and soil boring logs to develop a subsurface profile of site including historic fill thickness, depth to water, and average SPT N values for each stratum
- Analyzed shallow foundations and alternative foundation types listing advantages and disadvantages and cost of material per linear square foot
- Designed open steel pipe piles following FHWA guidelines to minimize settlement and maximize capacity

## TECHNICAL SKILLS

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### Modeling and Analysis Software and Tools

AutoCAD, RAM Structural System, Excel, MathCAD, Matlab, Microstation  
Bluebeam, Projectwise, OpenRoads, OpenBridge Designer, Microsoft Teams