

# NICOLE FRANCE

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## EDUCATION

### **University of Michigan**

*Bachelor of Science in Engineering in Mechanical Engineering*

Minor in Public Policy

GPA: 3.89/4.0

Coursework: Advanced Energy Solutions, Heat Transfer, Thermodynamics, Fluid Dynamics, Design and Manufacturing

Skills: Python, MATLAB, Microsoft Office, SolidWorks, ADAMS

**Ann Arbor, MI**

Expected May 2023

## EXPERIENCE

### **University of Michigan College of Engineering, TREE Lab**

*Research Assistant*

**Ann Arbor, MI**

September 2022 – Present

- Worked with a graduate student to study whether carbon capture in the ocean can be executed with electrochemical cells.
- Assembled and performed a variety of experiments on electrochemical H-cells to test for pH swing.
- Performed UV visualization on a variety of solutions.

### **Honeywell**

*Solutions Development Engineering Intern*

**Ann Arbor, MI**

May 2022 – August 2022

- Assisted in utility analysis, energy audits, and energy savings calculations for preliminary/feasibility assessments, RFP responses, and Investment Grade Audits for 15 accounts.
- Updated and added energy analysis features to savings calculation tools for future use.

### **University of Michigan College of Engineering, Civil and Environmental Engineering**

*Instructional Aide*

**Ann Arbor, MI**

January 2021 – April 2022

- Held office hours for 40 students where I answered questions, explained concepts, and worked through homework problems.
- Graded homework and assignments students submitted and organized teams of 3-4 students for study groups.

## PROJECT EXPERIENCE

### **Michigan Eco-Solutions Initiative**

*Project Lead*

**Ann Arbor, MI**

September 2019 – June 2022

- Lead a multidisciplinary engineering team of 20 students through researching and designing a sustainable water feature.
- Designed four variations of a more effective biogas stoves for a community in the Yucatán Peninsula.
- Analyzed cooking stove designs using information gained through research for two years.

## COMMUNITY SERVICE

### **U.S. Environmental Protection Agency**

*Office of Transportation and Air Quality Volunteer*

**Ann Arbor, MI**

June 2018 – August 2018

- Provided technical support to staff engineers by completing assigned tasks and presenting summary of findings.
- Researched fleet size, routes, and boat type for 20 marine shipping companies to be used in an industry characterization.
- Aided in a survey comparing light-duty vehicle tire pressure as it relates to fuel economy.

## LEADERSHIP

### **Epsilon Eta – Beta Chapter**

*Programming Chair*

**Ann Arbor, MI**

Jan 2021 – December 2021

Environmental Professional Fraternity focused on developing career skills and serving local communities through volunteering.

- Planned and organized all meetings, including panels, speakers, professional events, and volunteering.
- Collaborated with other executive board members and kept track of members' engagement requirements.

## ACTIVITIES

Pi Tau Sigma (Mechanical Engineering Honor Society), *Service Chair (2022)*

January 2021 – Present

Michigan Marching Band, *Rank Leader (2022)*

Fall 2019 – Present

## HONORS

Awards: University Honors (6 semesters), College of Engineering Dean's List (5 semesters), James B. Angell Scholar (4 semesters)