

# Tyler Estrada

Estrada.89@buckeyemail.osu.edu 847-903-4045

## EDUCATION

### **The Ohio State University**

Bachelor of Science in Mechanical Engineering GPA: 3.94/4

Master of Science in Mechanical Engineering

Dean's List

Columbus, OH

Dec 2024

Jan 2025 – May 2026

Autumn 2020 – Autumn 2024

## WORK EXPERIENCE

### **Ohio State Center for Automotive Research**

October 2024 – Present

#### *Research Fellow*

- Graduate Research Assistant for Ohio State's EcoCAR team, serving as the Team Lead for Connected Autonomous Vehicles (CAVs) sub team.
- Overseeing the development and integration of a Human-Machine Interface (HMI), including hardware installation and interface design.
- Responsible for python coding and optimizing the HMI's user interface to enhance usability and functionality for autonomous vehicle systems.

### **Mars Petcare Research and Development**

May 2024 – Aug 2024

#### *Process Engineering Intern*

- Lead the development of a 3D digital twin of the pilot plant, utilizing LiDAR scanning technology, enhancing operational efficiency and accuracy.
- Performed a comprehensive update of all process flow diagrams, modernizing legacy systems and streamlining procedures with a combined cost savings of \$1MM.

### **DuPont**

May 2023 – Dec 2023

#### *Reliability Engineer Co-op*

- Identified and categorized critical pieces of equipment on a major capital project to ensure process safety and EPA compliance.
- Project lead for efficient waste disposal that resulted in savings of 15%
- Researched and identified critical operating variables as a project decision point to provide savings of \$1.5MM annually.

## QUALIFICATIONS

Technical Skills: Proficient in Ansys, Matlab, Solidworks, AutoCAD, FEA, CFD, and Hypermesh

Programming Languages: Familiar with Python, Java, and C++

Relevant Coursework: System Integration and Control, Machine Elements, Real Time Robotics

Certifications: CSWA, FOG certified at TRC

## ACTIVITIES

### **OSU Rock Climbing Team Competitive Chair**

Aug 2021 – May 2023

- Coordinated the team's involvement in competitions in and out of state.

Active Member of The Ohio State University SHPE Organization.

Active Member of OSU Rock Climbing Team.