

TAVI KIPNIS

tkipnis@umich.edu • (650)-733-5250 • 619 East University Avenue, Ann Arbor, MI

OBJECTIVE or SUMMARY

Mechanical engineering student interested in transportation and energy. Looking for an internship in industry to gain practical experience in an engineering workplace.

EDUCATION

University of Michigan

Ann Arbor, MI

BS Mechanical Engineering

May 2025

GPA: 4.00 / 4.00, James B. Angell 4-Term Scholar, William J. Branstrom Award

Coursework: Statics & Dynamics, Thermodynamics I, Applied Circuits and Signals, Design and Manufacturing I

WORK EXPERIENCE

University of Michigan TREE Lab

Ann Arbor, MI

Research Assistant

April 2023 – August 2023

- Used MATLAB to analyze multiple data formats and create graphs that would be used in conference presentations
- Prepared, ran, and cleaned up experiments to analyze fuel cell efficiency and determine salt solution concentration
- Used Solidworks and Prusa printers to design and print improved flow channels to maximize turbulent fluid flow
- Presented experiment results and analysis in biweekly group meetings for review and feedback

University of Michigan

Ann Arbor, MI

Orientation Peer Advisor

June 2022 – July 2022

- Virtually and simultaneously guided multiple new students through using course registration software in a time-sensitive context
- Interfaced with over three hundred new students and answered questions about academics and student life
- Suggested changes to course registration software to improve understandability and efficiency

PROJECT EXPERIENCE

Design and Manufacturing I

Ann Arbor, MI

Project Team Member

January 2023 – Present

- Applied Pugh chart to narrow down concept designs for multi-purpose robot
- Used Solidworks to design robot's most critical subsystem
- Used manual mill and lathe to manufacture components to a precision of .005"

Introduction to Rocket Science

Ann Arbor, MI

Director of Technical Communication

August 2021 – December 2021

- Wrote introduction and conclusion of memo on project to reduce space debris
- Evaluated both risks and ethical concerns of multiple plans to reduce space debris
- Led design of presentation board which received a perfect score on technical communication

SKILLS

Programming Languages: MATLAB, Introductory C++, Python

CAD Skills: Solidworks Associate Certification, Beginner NX

Lab Technology: Potentiostat, Automatic Titrator, pH Measurement, Syringe Pump, UV-VIS Spectrophotometer, Keysight Multimeter and Oscilloscope, HP Power Supply

Professional Skills: Google Suite, Microsoft Word, Microsoft Excel

ACTIVITIES

Urbanism Club

8/21 – 2/23

OSTEM

8/22 – 2/23