Julian Skifstad

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EDUCATION

University of Michigan – GPA: 3.975 **Ann Arbor, MI**
Major in Robotics – Minor in Mathematics *Class of 2026*
Relevant Coursework: How to Build Robots and Make Them Move, Data Structures and Algorithms, Computational Linear Algebra, Solar Energy and Self Powered Wireless Systems, Intro Human-Robot Systems, Introduction to Analysis

- William J. Branstrom Freshman Prize for Academic Excellence
- Tau Beta Pi Honor Society Electee
- IEEE-Eta Kappa Nu Honor Society Electee

PROJECT EXPERIENCE

Development of a Commercial Drone Platform for Astronomy Applications **Ann Arbor, Michigan**
Research Assistant *8/28/23 - 12/15/2023*

- Worked under Dr. John Monnier, Professor of Astronomy, to develop a formation flying drone platform for in-atmosphere interferometry.
- Designed and conducted tests to measure the localization precision for high end commercial drones.
- Analyzed the collected data using python to assess the results of the tests, plotting the GPS data and calculating the discrepancy between the drones' localization data and my physical measurements.

Solar Energy and Self Powered Wireless Systems - Final Project **Ann Arbor, Michigan**
Team Member *9/01/22 - 12/16/22*

- Designed a self-powered device that automatically watered a houseplant, collected and wirelessly transmitted data, and was fully powered by solar energy
- Constructed a working prototype of the design, which implemented a motor, bluetooth module, multiple sensors, and a solar cell and MPPT, using an Arduino and breadboard
- Researched a potential market for the device as if it were being sold by a startup

Michigan Student AI Laboratory **Ann Arbor, Michigan**
Team Member *1/15/23 - Present*

- Built a multilayer perceptron from scratch using python.

WORK EXPERIENCE

Instructional Aide **Ann Arbor, Michigan**
Intro Human Robot Systems *8/28/23 - Present*

- Led a lab section, held office hours, and facilitated make-up labs.
- Provided feedback on assignments before they were posted, improving clarity.
- Assisted with grading student submissions.

EXTRACURRICULAR EXPERIENCE

Study Abroad - Engineering in Buenos Aires **Buenos Aires, Argentina**
Student *5/18/23 - 7/1/23*

- Attended Instituto Tecnologico de Buenos Aires (ITBA) to take Physics II with lab.
- Traveled all around Argentina, visiting Iguazú Falls, El Calafate and El Chaltén in Patagonia, and more.
- Lived with a host family which significantly improved my Spanish speaking abilities.

SKILLS

Computer Programming: C++, Julia, Python, Java, Arduino IDE, STM32cube IDE, Matlab
Computer Aided Design: Solidworks, Fusion 360, Catia, Onshape.
Miscellaneous: Working Proficiency in Spanish, Chauffeur's License (with experience driving trailers).

INTERESTS & ACTIVITIES

Solo Pianist *2008 – Present*
Soccer Player *2009 – 2022*