

Darren Cleeman

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EDUCATION

University of Michigan

Bachelor of Science in Engineering (Major: Robotics | Minor: Computer Science)

GPA: 3.319

Relevant Coursework: Robotic Manipulation, Robotic SLAM, Data Structures & Algorithms

Ann Arbor, MI

Graduation Date: May 2026

WORK EXPERIENCE

General Atomics Aeronautical Systems

Software Engineering Intern

Poway, CA

6/2024 - 8/2024

- Designed and built several features for a plane to ground station communication simulation tool
- Leveraged Python's Tkinter library to build and integrate the new features into the GUI
- Updated a Bash script to safeguard files in designated directories from deletion during the build process of a containerized codebase, improving efficiency
- Improved functionality and reliability by debugging and refactoring legacy code, ensuring previously malfunctioning simulation features operated seamlessly.

Aware Buildings (Previously subdivision of BuildingLink)

Engineering Intern

New York, NY

6/2022 - 7/2022

- Assembled, installed functionality software, and tested hundreds of sensors (temperature, humidity, water leaks, and motion/vibration) for large-scale deployment into residential apartment buildings
- Assisted in installation of sensors into residential gyms, to monitor equipment usage, to more effectively allocate funds for new gym equipment and repairs
- Learned to install and set-up software for LoRaWAN network routers, specifically designed for thick-wall penetration, ideal for communicating with sensors in residential buildings

PROJECT EXPERIENCE

Tech Jam and Innovation Program (University of Michigan)

Project Manager

Ann Arbor, MI

9/2022 – 11/2022

- Organized and helped develop a pitch for a new app to facilitate the friend-making process in college
- Created schedule for milestones, and motivated the team to meet deadlines
- Oversaw development of UI/UX, target market analysis, competitor analysis, and interviews for product market fit

RESEARCH EXPERIENCE

HaptiX Laboratory, University of Michigan

Undergraduate Researcher

Ann Arbor, MI

10/2023 – 5/2024

- Executed detailed moment of inertia evaluations on drones using the bifilar pendulum method, gathering data to refine autonomous drone flight simulations.
- Improved experimental procedures for inertia measurements, enhancing data quality for UAV research.
- Conducted thrust testing for drone motors, initially attempting repair and recalibration of a specialized board through soldering techniques, then switched to a new thrust tester that required the use of Arduino code.

Seeman DNA Nanotechnology Laboratory, NYU

Undergraduate Researcher

New York, NY

6/2023 - 8/2023

- Designed DNA sequences using ChimeraX to act as a blueprint for DNA crystallization
- Performed various lab experiments including gel electrophoresis and DNA purification to prepare the DNA for the crystallization process

SKILLS

Coding Languages: C++, Python, Bash Script, R, Julia, MATLAB

OS's: Linux

IDE's: VSCode, RStudio, MATLAB environment