Andrew Dailey

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EDUCATION

University of Michigan, Ann Arbor, MI — **Expected Graduation: April 2025**
College of Engineering - B.S. Computer Engineering — **GPA: 3.88 / 4.0**
Dean's List All Semesters
Relevant Course Topics: Data Structures (**C++**), Algorithms, Quantum Nanotechnology, Circuits, Logic Design

RELEVANT EXPERIENCE

Siemens Smart Infrastructure - Fire Safety — **May 2023 - July 2023**
Software Internship — Parsippany, NJ

- Ensured code and **Makefile** consistency and integrity throughout data migration to **Git**, guaranteeing reliable production deployment and streamlining integration and updates on legacy systems
- Co-developed a full-stack **Python** application for customers and developers to configure fire safety systems
- Actively participated in daily **Agile** project management standups and scrum meetings
- Supported software team with **Docker**, **MQTT**, and networking protocols for fire detection systems

UM Electric Boat — **August 2022 - Present**
Powertrain Lead / Simulation Engineer — University of Michigan

- Organizing the powertrain subteam to design in **CAD** and manufacture a high power, high voltage accumulator system
- Researching and developing a complete system to power all subsystems of the boat while interfacing with other subteams, including cooling systems, drivetrain, and controls.
- Designed an unprecedented 6DOF rigid-body hydrodynamic physics model simulation in **MATLAB** based on a hydrofoiling vessel with adjustable flaps, for use in control system testing and active stabilization

Charge Collective — **February 2023 - June 2023**
Technical Intern — Remote (Los Angeles, CA)

- Pioneered the creation of a web scraping utility, leveraging automation to identify lucrative funding opportunities and government grants for the **EV** startup.
- Provided vital guidance on website hosting solutions and other software for workflow management
- Played a vital role in the early-stage growth of the startup, contributing to the successful closure of pre-seed funding

Audio Accessibility Lab — **February 2023 - April 2023**
Research Assistant — University of Michigan

- Developed tactile sound panels, enabling blind individuals to feel sound waveforms.
- Collaborated with graduate students to enhance accessibility for people with disabilities.
- Implemented strategies for creating an inclusive lab space for the disabled community.

ADDITIONAL EXPERIENCE/CLUBS

- **Other Projects**
  - Microphone-based resonance analysis of a saxophone, using **ESP8266**
  - Freelance design of a crawlbot for home inspections, using **ESP32-CAM**
  - Prototyping of GPS and US to create a following golf caddy, using **Arduino**
  - Design of a WiFi-enabled AHRS for star tracking (+ custom PCB) using ESP8266
- **Michigan Casual Music Maker's Club** - President
- **Michigan Climbing Club** - Member
- **FIRST Robotics Team 102** - High school robotics team president
- **International Hydrofoil Society** - Member since 2022
- **NJ Seal of Biliteracy in French**