AMY LEE

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EDUCATION

University of Michigan — College of Engineering

Ann Arbor, MI

Bachelor of Science in Engineering in Computer Science

April 2026

- **GPA:** 4.00/4.00 | **Awards:** William J. Branstrom Freshman Prize, Engineering Dean's List
- Courses: Data Structures & Algorithms, Introduction to Human-Robot Systems

EXPERIENCE

Nexteer Saginaw, MI

Embedded Systems Intern

June 2024—Aug. 2024

- Developed a handwheel angle sensor that calculates the absolute handwheel angle and samples sensors 100% faster than previously before at a rate of 1 millisecond with sensor diagnostics
- Used Saleae, Logic Pro, and CANoe to record sensor input and evaluate for proper sensor output
- Designed and fabricated a 25-pin connector to enable a power supply to be remote programmable

Michigan Solar Car Team

Ann Arbor, MI

Software Developer

Aug. 2023—Present

- Created a binary search model that determines the optimal speed strategy using empirical and optimization models representing the car's net energy consumption
- Simplified the simulator's installation requirements by replacing Rust time tools with C++ time tools
- Spend at least 8 hrs/week implementing various improvements to the current simulator by modeling end of day charging when the sun sets, simplifying command line arguments, and adding and handling a new schedule data, and simulating the race with respect to time

GEMINI Project Midland, MI

Team Lead

Sept. 2022—Apr. 2023

- Developed an Arduino-based prototype of a noninvasive blood glucose monitoring system within 3 months with other team members via \$1,000 grant sponsorship of the A. H. Nickless Foundation
- Coordinated outreach endeavors with MyMichigan healthcare professionals through in-person interviews for medical professional input and perspectives
- Awarded 3rd place Finalist in regional A. H. Nickless Foundation competition

Michigan State University St. Andrews

Midland, MI

Material Science Student Researcher

Jun. 2022—Aug. 2022

- Designed a workflow for customizable knee pads for 40 hours/week and was awarded Top 3 Poster in regional American Chemistry Society conference
- Utilized EinScan 3D scanner, Material Testing Systems machine, and a variety of 3D printers (e.g. Prusa i3 MK3S+, FlashForge Dreamer NX, Raise 3D Pro3) for knee pad design, fabrication, and testing

PROJECTS

- Wireless Walker an Arduino, ultrasonic sensor, and servo contraption that alerts the user of potential cane collisions by emitting a sound and achieved 3rd place at SpartaHack 8.
- TrekTician a website dedicated towards helping a user plan out their trip. The front-end was built with Vite and React, and the backend consisted mainly of Flask communicating with the GEMINI API.

SKILLS

- Languages: C++, Python, Java, JavaScript
- Technologies: WSL, Git, Autodesk Inventor, Autodesk Fusion 360, SolidWorks