AMY LEE

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EDUCATION

University of Michigan — College of Engineering **Ann Arbor, MI**
Intended Major in Computer Science *May 2027*

- **GPA:** 4.00/4.00 | **Awards:** William J. Branstrom Freshman Prize, Engineering Dean's List
- **Courses:** Data Structures & Algorithms, Computer Science Pragmatics

EXPERIENCE

Nexteer **Saginaw, MI**
Embedded Systems Intern *June 2024—Aug. 2024*

- Developed a handwheel angle sensor that calculates the absolute handwheel angle given two relative angle measurements at a rate of 2 milliseconds.
- Used Saleae and Logic Pro to record and analyze the SENT protocol used by the inductive sensors.
- Sent final handwheel angle measurements through a CAN bus and visualized the output through CANoe to validate the handwheel angle output.

Michigan Solar Car Team **Ann Arbor, MI**
Strategy Team Member *Aug. 2023—Present*

- Created a binary search model that determines the optimal speed using empirical and optimization models representing the car's powertrain, resistive forces, and net energy consumption.
- Improved the simulator's run time by replacing Rust time tools with C++ time tools.
- Implemented 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.

Michigan State University St. Andrews **Midland, MI**
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++, Java, Python
- Technologies: WSL, Git, Autodesk Inventor, Autodesk Fusion 360, SolidWorks