Ashley Heckman

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School Address	Home Address
Ithaca, NY 14850	Winter Garden, FL 34787

Education

Cornell University (Ithaca, NY)   **January 2024 – December 2024 (Expected)**
- M.Eng. Electrical and Computer Engineering

Cornell University (Ithaca, NY)   **August 2020 - May 2024**
- B.S. Electrical and Computer Engineering
- Computer Science Minor
- Dean's List

Brighton High School (Brighton, MI)   **August 2016 – May 2020**
- High School Diploma
- Top 2%
- 4.25 Weighted GPA, 4.0 Unweighted GPA

Selected Projects (Check out my website for more information and projects)

Plant Watering System
Using a Raspberry Pi and external sensors, autonomously water the selected plant. Includes a nice user interface for the user to select their plant and watering mode.

Computer Processor
Develop a single-core and multi-core pipelined computer processor capable of running basic programs.

Autonomous Robot
Using an Arduino and external sensors, navigate through a maze until two treasures are found and analyzed.

Ecosystem Simulator
Using the DE1-SoC FPGA, display a marine ecosystem that models the behaviors of various sea creatures.

Skills

• C	• Quartus	• Waveform Debugging
• C++	• Vivado HLS	• Github
• Linux	• Microcontroller Programming	• Microsoft Office
• Python	• Computer Architecture	• Communication & Teamwork
• Verilog	• Oscilloscopes & Function Generators	• Problem Solving

Work Experience

Systems Engineer Intern D   L3Harris Technologies (Palm Bay, FL)   May 2023 - Dec 2023
- Created a document detailing what is required from the satellite operation center
- Reviewed hardware requirements
- Helped configure virtual machines
- Created sequence diagrams to describe code
- Found alternative parts for products with long lead times
- Installed rack components & labelled and wired rack cables

Embedded Software Engineer   Cornell Hyperloop (Ithaca, NY)   August 2022 – Jan 2024
- Design electronic systems to control a hyperloop pod
- Build circuits using Arduino and sensors; write software to control the state of the pod; read sensor data; communicate data to GUI

Embedded Operating Systems TA   Cornell University (Ithaca, NY)   August 2023 - Present
- Cover a lab section. Guide students through the lab, answer questions, and debug any issues that arise
- Grade homework, lab reports, and final projects

Undergraduate Resident Fellow   Keeton House (Ithaca, NY)   August 2022 – May 2024
- Serve as a peer mentor; help build a safe and welcoming community; plan/promote a variety of programs and activities; provide assistance, resources, and referral information to students