

Ashley Heckman

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School Address
Ithaca, NY 14850

Home Address
Winter Garden, FL 34787

Education

Cornell University (Ithaca, NY)	January 2024 – December 2024 (Expected)
<ul style="list-style-type: none">M.Eng. Electrical and Computer Engineering	
Cornell University (Ithaca, NY)	August 2020 – May 2024
<ul style="list-style-type: none">B.S. Electrical and Computer EngineeringComputer Science MinorDean's List	
Brighton High School (Brighton, MI)	August 2016 – May 2020
<ul style="list-style-type: none">High School DiplomaTop 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 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

<ul style="list-style-type: none">CC++LinuxPythonVerilog	<ul style="list-style-type: none">QuartusVivado HLSMicrocontroller ProgrammingComputer ArchitectureOscilloscopes & Function Generators	<ul style="list-style-type: none">Waveform DebuggingGithubMicrosoft OfficeCommunication & TeamworkProblem Solving
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Work Experience

Systems Engineer Intern D	L3Harris Technologies (Palm Bay, FL)	May 2023 – Dec 2023
<ul style="list-style-type: none">Created a document detailing what is required from the satellite operation centerReviewed hardware requirementsHelped configure virtual machinesCreated sequence diagrams to describe codeFound alternative parts for products with long lead timesInstalled rack components & labelled and wired rack cables		
Embedded Software Engineer	Cornell Hyperloop (Ithaca, NY)	August 2022 – Jan 2024
<ul style="list-style-type: none">Design electronic systems to control a hyperloop podBuild 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
<ul style="list-style-type: none">Cover a lab section. Guide students through the lab, answer questions, and debug any issues that ariseGrade homework, lab reports, and final projects		
Undergraduate Resident Fellow	Keeton House (Ithaca, NY)	August 2022 – May 2024
<ul style="list-style-type: none">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		