

Ashley Heckman

(517) 715-3414 | agh93@cornell.edu

Education

CORNELL UNIVERSITY (ITHACA, NY) | 2020 –

- B.S. Electrical and Computer Engineering
- Expected Graduation: May 2024
- Dean's list every semester
- 3.70 GPA

BRIGHTON HIGH SCHOOL (BRIGHTON, MI) | 2016 - 2020

- High School Diploma
- Top 2%
- 4.25 GPA

Work and Volunteer Experience

EMBEDDED SOFTWARE ENGINEER | CORNELL HYPERLOOP (ITHACA, NY) | 2022 -

- Build circuits using Arduino and sensors; write software to control the state of the pod; read sensor data and communicate data to GUI.

UNDERGRADUATE RESIDENT FELLOW | KEETON HOUSE (ITHACA, NY) | 2022 -

- 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.

BKOM MENTOR | BRIGHTON HIGH SCHOOL (BRIGHTON, MI) | 2018 - 2020

- Mentor incoming freshmen; serve as a role model; be their point of contact if anything comes up.

AFTER SCHOOL TUTORING | BRIGHTON HIGH SCHOOL (BRIGHTON, MI) | 2018 - 2020

- Tutor people who need help in various subject areas twice a week.

Skills & Experience

PROGRAMMING

- C, C++, Verilog, Python, Java. Able to pick up new languages quickly.

COMPUTER ARCHITECTURE

- Design, implement, test, and evaluate a complete multicore system capable of running a simple C program.
- Processor microcoding and pipelining; cache microarchitecture and optimization; network topology, routing, and flow control; superscalar execution; branch prediction; out-of-order execution; etc.

INTELLIGENT PHYSICAL SYSTEMS

- Build and test a fully operational autonomous robot that is capable of traversing through a maze and finding hidden IR LEDs in the maze.
- Microcontrollers; sensors; motors & actuators; circuit & software debugging.