

EDUCATION

Massachusetts Institute of Technology (MIT)

Candidate for Bachelor of Science in Electrical Engineering and Computer Science • GPA: 4.8/5.0

Cambridge, MA

June 2020

New Holstein High School

• GPA: 4.0/4.0 • Rank: 1/90

New Holstein, WI

Sep 2012 – May 2016

Relevant Coursework

- Interconnected and Embedded Systems • Intro to Electrical and Computer Engineering • Deep Learning for Self-Driving Cars
- Intro to Computational Thinking and Data Science • Intro to C and C++ • Brief Intro to Python
- Multivariable Calculus • Differential Equations • Physics: Classical Mechanics & Electricity and Magnetism • Microeconomics

EXPERIENCE

Autonomous Vehicle Software Development for Volvo Cars

Detroit, MI

Summer Intern at Zenuity (Volvo / Autoliv)

Jun 2017 – current

- Focusing on creating computer vision algorithms for autonomous driving. Implemented computer vision testbed and creating software for autonomous valet parking.

Robotics Research at the MIT CSAIL

Cambridge, MA

Undergraduate Researcher in the Model-Based Embedded and Robotics Systems Group

Sep 2016 – Jun 2017

- Worked on using a land rover and a quadcopter in cooperation to navigate an area and perform tasks autonomously. Also created a ROS (Robot Operating System) tool for multi-robot communication called ROS-MultiMaster-App, which is open-sourced on my GitHub account at github.com/ethanweber.

AREALYTICS

Cambridge, MA

Project Teammate and Software/Hardware Developer

Apr 2017 - current

- Created a class final project that can track wireless devices and log anonymous analytics for retail, home, and educational use cases. We are continuing development outside of class with startup funding from MIT Sandbox.

DARPA (Defense Advanced Research Projects Agency) Project

Arlington County, VA

Project Participant

Jul 2014

- Worked with DARPA and Booz Allen Hamilton employees to create an EMG (electromyography) display for the annual DARPA Family Day

FIRST Robotics Competition

Fond du Lac, WI

Team Captain

Sep 2013 – Sep 2016

- Drove robot at computations and lead software and electrical aspects

Hackathon at University of Michigan--Ann Arbor

Ann Arbor, MI

Teammate

Sep 2015

- Created a project to help the visually impaired through object recognition and vibration feedback and won “Best Overall Use of Microsoft Technology” award

LEADERSHIP

MakeMIT

Cambridge, MA

Event Organizer

Sep 2016 – Current

- Organizing the MakeMIT hardware hackathon with a committee to promote the maker culture of college students

National Honor Society, Student Body, and Lutheran Youth Fellowship

New Holstein, WI

NHS President (Senior Year), Class President (Sophomore & Senior Year), and LYF President

Sep 2012 – May 2016

- Led meetings, volunteered, and organized events

SYNERGY - New Holstein Science Podcast

New Holstein, WI

Co-Founder

Jan 2016 – May 2016

- Co-founded a local science podcast, called “SYNERGY - NH Science Podcast,” to increase awareness about science-related topics

AWARDS

- **FIRST Robotics Dean’s List Finalist:** Received a prestigious award for leadership, passion, and expertise in robotics
- **Math and Science Excellence Awards:** Voted top math and science student by my high school teachers
- **“Best Overall Use of Microsoft Technology”:** Awarded by Microsoft at the University of Michigan’s Hackathon
- **Forensics Gold Medalist:** Wrote, delivered, and became a gold medalist with a 4-minute speech about cyborg technology

SKILLS

Computer: Python, Java, C++, C, JavaScript, HTML, CSS, C#, Linux, Arduino, Raspberry Pi, Processing, PTC Creo CAD, SolidWorks

Activities: MakeMIT Committee, Model-based Embedded and Robotic Systems (MERS) Research, Soccer, Zeta Psi Fraternity

College Acceptances: MIT, Stanford, CMU School of Computer Science, Cornell, UW Madison, UI Urbana-Champaign