362 Memorial Drive Cambridge, MA 02139

Ethan Weber

+1-920-286-0426 ejweber@mit.edu ethanweber.me

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, WI

New Holstein High School • **GPA**: 4.0/4.0 • **Rank**: 1/90

Sep 2012 - May 2016

Relevant Coursework

- Underactuated Robotics Probability and Random Variables Feedback System Design Human 2.0 Circuits and Electronics Microeconomics
- Intro to Artificial Intelligence Signals and Systems Intro to Algorithms Interconnected and Embedded Systems Intro to C and C++
- Intro to Electrical and Computer Engineering Deep Learning for Self-Driving Cars Intro to Computational Thinking and Data Science

EXPERIENCE

Subject Tracking for Autonomous Quadcopters

Redwood City, CA

Deep Learning Intern at Skydio

Jun 2018 – Aug 2018

• Created and evaluated convolutional recurrent neural networks for trajectory prediction using images for semantic scene understanding.

Deep Learning and Computer Vision

Palo Alto, CA

Deep Learning Intern at The Markov Corporation

Jan 2018 – Feb 2018

• Worked on deep learning for stereo vision with computer vision algorithms in OpenCV and convolutional neural networks in Keras and TensorFlow.

Autonomous Vehicle Software Development for Volvo Cars

Detroit, MI

Summer Intern at Zenuity (Volvo / Autoliv)

Jun 2017 - Aug 2017

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

Robotics Research at the MIT CSAIL

Cambridge, MA

Undergraduate Researcher in the Robot Locomotion Group

Sep 2017 – current

• Worked with NASA's humanoid robot, Valkyrie and Atlas for motion planning and fall recovery. Implemented algorithms in and out of simulation. Used Drake (http://drake.mit.edu/) and collaborated with Toyota Research Institute.

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 location analytics for retail, home, and educational use cases. We obtained startup funding from MIT Sandbox but didn't have time to continue the project.

Hackathon Projects

MIT - HackMIT 2017

Sep 2017

• Created an AR travel application to virtually travel to cities in an augmented world. Won "Best Use of Amadeus APIs" and "Best Travel Hack" by Concur

University of Michigan—Ann Arbor - MHacks 6

Sep 2015

• Created a project to help the visually impaired through object recognition and vibration feedback. Won "Best Use of Microsoft Technology"

LEADERSHIP

SpecialX Director

Cambridge, MA May 2018 - Current

Organize VC and startup events, tech talks, and experiment with new ways to improve MIT's campus through tech

MakeMIT

Cambridge, MA

Event Organizer

Sep 2016 – Jun 2018

• Organized the MakeMIT hardware hackathon with a committee to promote the maker culture of college students

AWARDS

- FIRST Robotics Dean's List Finalist: Received a prestigious award for leadership, passion, and expertise in robotics
- Forensics Gold Medalist: Wrote, delivered, and became a gold medalist with a 4-minute speech about cyborg technology

Computer: Python, TensorFlow, Keras, C++, C, Java, 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