

Silvia Knappe

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EDUCATION

- **Massachusetts Institute of Technology (MIT)** **Cambridge, MA**
 - Candidate for BS in Electrical Engineering and Computer Science, GPA: 4.8/5.0 Expected June 2021
 - Prospective candidate for MEng in Electrical Engineering and Computer Science June 2022
 - Relevant Coursework: Machine Vision, Robotics: Science and Systems, Intro to Machine Learning, Computer Systems Engineering, Algorithms, Interactive Music Systems, Signal Processing, Circuits

RELEVANT EXPERIENCE

- **Machine Learning Applications Team at Amazon Robotics** **Virtual/North Reading, MA**
Software Engineering Intern June 2020 - August 2020
 - Designed and implemented a low-latency autofocus system using machine learning
 - Captured clear images of objects moving up to 2m/s by using liquid lens camera technology
- **Learning and Intelligent Systems Lab** **Cambridge, MA**
Undergraduate Researcher September 2019 - May 2020
 - Researching Active Simultaneous Localization and Mapping implementations
 - SuperUROP scholar in the Advanced Undergraduate Research Opportunities Program
- **Women's Technology Program** **Cambridge, MA**
Residential Tutor June 2019 - August 2019
 - Taught high school girls electrical engineering over the span of the 4-week program
 - Developed a lecture and lab for the students
 - Held office hours to help students with homework and labs
- **Research Internship at the Karlsruhe Institute of Technology** **Karlsruhe, Germany**
Summer Research Intern June 2018 - August 2018
 - Participated in ongoing research project to use computer vision to assist the visually impaired
 - Improved the detection of surfaces by training neural networks to detect and classify objects

WORK AND LEADERSHIP EXPERIENCE

- **MIT Lab Assistant** **Cambridge, MA**
Lab Assistant for Fundamentals of Programming (6.009) February 2020 - Present
 - Assist and evaluated students with lab assignments and clarified programming concepts
 - Collaborate with staff to improve the course as well as to overcome significant teaching hurdles that the new virtual class format poses
- **MIT Lab Assistant** **Cambridge, MA**
Lab Assistant for Intro Signal Processing September 2019 - December 2019
 - Assisted students during office hours with homework and lab assignments
 - Collaborate with professors, graduate teacher assistants, and other lab assistants to improve the course
- **MIT Project Manus Mentor** **Cambridge, MA**
Makerspace Mentor October 2018 - Present
 - Train MIT students to use makerspace machines such as bandsaws, 3D printers, and laser cutters
 - Work together with adults in charge of the makerspace to foster a positive student maker community
- **MIT Information Systems and Technology** **Cambridge, MA**
Student Tech Support Worker October 2017 - January 2019
 - Worked as tech support, solving technology problems that MIT students, staff, and faculty may have
 - Partnered in a team with full-time IT specialists to provide an excellent customer experience

ACTIVITIES

- **MIT Sport Taekwondo Team** September 2018 - Present
- **MIT Chamber Music Society** September 2017 - Present

SKILLS

- **Programming/Computer:** Python, C++, Proficient using Linux
- **Languages:** Fluent in German, Spanish, and English