

Sophia Li

1965 Kristin Dr, Troy, Michigan, 48084
Cell: (857) 333-8430

sophia.li@students.olin.edu
justsophie.com

EDUCATION

FRANKLIN W. OLIN COLLEGE OF ENGINEERING

Needham, MA

Bachelor of Science Candidate, Robotics. Class of 2017

GPA: 3.70

- Selected Prev. Classes: Software Systems, Fund. Computer Science, Discrete Math, Mechanical Dynamics
- Course Assistant: Software Design, Computational Robotics, Computer Architecture

PROFESSIONAL EXPERIENCE

Olin College Robotics Lab

Needham, MA

Research Assistant

Feb 2014 – present

- Edwin, intuitive co-worker robots (current project)
 - Using Robotic Operating System (ROS) and Tkinter, wrote a package that allows easy setup and operation of poses and behaviors for an ST-R17 robotic arm, nicknamed “Edwin”
 - Used OpenCV to give Edwin the ability to play tic-tac-toe with a human operator using marker and paper
- Jimmy: Intel 20th Century Robots
 - Used ROS to write packages that allow general human robot interaction including face tracking, speech recognition, and posture generation
- Olin Trans-Atlantic Robot Tuna
 - Used OpenCV to create an underwater navigation system that uses structured light and QR codes for localization and object avoidance

Apple Inc.

Cupertino, CA

Camera Testing and Validation Intern

May 2015 – Aug 2015

- Wrote software for LED integrating sphere for automating various camera validation tests
- Wrote a bash script for automating iPhone/iPad image capture/download

Senior Capstone Program in Engineering (SCOPE)

Needham, MA

Locus Robotics Team, Hired Student Assistant

Jan 2016 – May 2016

- Writing movement package for UR10 robot arm for collaboration with human operators in factory setting

Boeing Team, Hired Student Assistant

March 2015 – May 2015

- Wrote indoor localization code for mobile robots using 2D fiducials

PERSONAL PROJECTS

WALL-E

- Used OpenNI and NiTE to create a code infrastructure for gesture/posture recognition and the associated robotic responses to simulate the movie WALL-E robot as a personal interest project
- Implemented code infrastructure on mechanical platform to build mobile and reactive WALL-E. Demoed WALL-E to the delight of many elementary students, demonstrating achievement of convincing likeness to the movie

S&R Stationery (Web Store)

- Selling niche imported stationery goods as a practice in entrepreneurship
- Learning from interactions with Chinese sellers to better Chinese language skills, and negotiations with online bloggers and social media to improve marketing skills

ADDITIONAL SKILLS

- Experienced with Python, C++, OpenCV and various ROS packages for use in computer vision, indoor navigation
- Experienced with micro-controller C for developing a Controller Area Network API for “Research in Electric Vehicles” club and use of Arbotix boards in research
- Experienced with Ubuntu Linux
- Fluent in spoken Mandarin Chinese, professional fluency in French
- Plays acoustic guitar, violin, and piano. Also likes to bake.

Thanks for reading, have a nice day!