

Sophia Li

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

sophia.li@students.olin.edu
github.com/srli

EDUCATION

FRANKLIN W. OLIN COLLEGE OF ENGINEERING

Needham, MA

Bachelor of Science Candidate, Class of 2017

GPA: 3.68

- Selected Fall '15 Classes: Mechanical Dynamics, Software Systems, Principles of Engineering
- Course Assistant: Software Design (Spr '15), Computational Robotics (Fall '15), Computer Architecture (Fall '15)

PROFESSIONAL EXPERIENCE

Olin College Robotics Lab

Needham, MA

Research Assistant

Feb 2014 – present

- Edwin, intuitive co-worker robots (current project)
 - Porting Jimmy and WALL-E interaction code to an ST-R17 robotic arm, re-writing code packages to suit new hardware infrastructure
- Jimmy: Intel 20th Century Robots
 - Used Robotic Operating System (ROS) to write ROS packages that allow general human robot interaction including face tracking, speech recognition, and posture generation
 - Used accelerometer microchip to help control Dynamixel servos in simulating human proprioception abilities in 36" humanoid robot
- 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 code wrapper for automating iPhone/iPad image capture/download

Senior Capstone Program in Engineering (SCOPE), Boeing Team

Needham, MA

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
- Observing product trends to set prices and discounts, as well as selecting new goods
- 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++, and various ROS packages for use in computer vision, indoor navigation
- Experienced with micro-controller C for developing Controller Area Network API for "Research in Electric Vehicles" club and use of Arbotix boards in research
- Experienced with Ubuntu Linux
- Fluent in Mandarin Chinese, French
- Plays acoustic guitar, violin, and piano. Also likes to bake.

Thanks for reading, have a nice day!