Sophia Li

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!