Edward Ahn

(412) 499 – 1687 | edwardahn@cmu.edu | github.com/edhyah | linkedin.com/in/edwardsahn

Passionate about intelligent robots.

Education

Carnegie Mellon University – Pittsburgh, Pennsylvania May 2018

B.S. in Electrical & Computer Engineering

Additional Major in Robotics

- GPA: 3.88, Major GPA: 4.00
- Coursework: Embedded Real-Time Systems, Fundamentals of Control, Computer Vision, Structure and Design of Digital Systems, Introduction to Robotics, Electronic Devices & Analog Circuits

Singapore American School – Singapore, Singapore 2012 – 2014

- Excellence in Computer Science Award (2014)

Work Experience

Hardware Engineering Intern, Google Summer 2016

- Work on the Satellite Systems Engineering team of Terra Bella (formerly known as Skybox Imaging)
- Calibrate satellite's camera, using nonlinear regression and signal processing techniques
- Test hardware validation of satellite controller board, involving writing embedded C code

Research Assistant, Autonomous Driving 2016 - Present

- Develop path-planning algorithms in C++ for large vehicles like extended trailer trucks, buses
- Build hardware for actuation and sensing of scaled-down models of target vehicles for testing

Teaching Assistant, Principles of Imperative Computation Fall 2015

- Teach imperative programming based on C
- Topics focus on data structures, algorithms and computational thinking

Research Assistant, Google Lunar XPRIZE – CMU Planetary Robotics Lab Spring 2015

- Prototyped a sun sensor that processed images from fisheye lens to calculate elevation/azimuth angles
- Angles make attitude determination for lunar rovers more accurate

Projects & Skills

FifthSense Fall 2015

- PennApps (36-hour hackathon) project (http://devpost.com/software/brailleware)
- Assistive mobile platform designed to make features of smartphones accessible to the visually impaired
- Allows people to transmit and receive braille messages through six vibrating buttons controlled by an Arduino
- Linked device to a simple QA service (personal assistant) on Android to demonstrate its potential usefulness
- Honors: PennApps Grand Prize, PennApps Best Hardware Hack, Best AlphaLab Gear Hardware Hack

QBot Spring 2015

- 3D-printed robot that navigates under the control of an Android smartphone
- Autonomous navigation achieved after implementing a line-following algorithm in an Android application
- Honors: 2015 Carnegie Mellon Mobot Races First Place (cs.cmu.edu/mobot/index.html)

Technical Skills: Java, Python, C, C++, MATLAB, HTML/CSS, JavaScript

Extracurricular Activities

Carnegie Mellon Robotics Club 2014 – Present

Treasurer (2016 – Present)

- Handle club funding involving allocation of donations, company sponsorships, university-provided funds

Training Officer (2015)

- Organize and teach robotics tutorials focusing on Arduinos, 3D printing, laser cutting and shop training