JEREMY ONG

jeremyong.me
tto@andrew.cmu.edu | 360.890.7776

EDUCATION

CARNEGIE MELLON UNIVERSITY May 2020

B.S.in Computer Science, Minor in Machine Learning, Cumulative GPA: 3.80/4.00

SKILLS

TECHNOLOGIES:

Python, C++, Tensorflow, Unix, Qt, CUDA, OpenCV, Flask, Node.js, MongoDB, PostgreSQL, React, Redux

COURSEWORK:

Algorithm Design and Analysis, Computer Systems, Parallel Computer Architecture and Programming, Programming Language Theory, Machine Learning, Modern Regression, Mobile Robot Programming

TECHNICAL EXPERIENCE

AURORA INNOVATION | SOFTWARE ENGINEERING INTERN Jun-Aug 2018

- Built the core communication system between autonomous vehicle operator software and the company fleet monitoring dashboard.
- Configured automatic hyperparameter tuning for the training of perception models.
- Scripted a program to visualize the global poses of training data.

CARNEGIE MELLON CENTER FOR MACHINE LEARNING AND HEALTH | RESEARCH ASSISTANT Jun-Aug 2017

- Worked on GenAMap, a visual machine learning platform for genome studies.
- Architected systems to efficiently transfer data between the backend and user interface.

PROJECTS

SIMON SYSTEM | PENNAPPS Sep 2018

- Consists of two arenas with identical blocks in each. One of the arenas has our robot Simon in it. When blocks are moved in the other arena, Simon copies the configuration.
- Implemented the computer vision, path planning, and component communication.

MODWARE | PENNAPPS Jan 2018

- A modular internet of things hardware prototyping kit for the software engineer.
- *Winner*: 2nd place overall, Lutron's IOT award, best hardware hack, hacker's favorite.

FACEBOOK DISCOURSE | FACEBOOK GLOBAL HACKATHON Nov 2017

- A debate platform that fosters productive discourse.
- Presented to the VPs of Technology of Oculus VR, Instagram, and WhatsApp.
- *Winner*: First place out of 20 finalist teams from 11 different countries.

RESISTAR | TARTANHACKS Feb 2017

- An educational augmented reality circuit solver app using Unity.
- Designed algorithms which processed 3D coordinates of physical components to solve for current, voltage, and power and create an electron flow visualization overlay.
- *Winner*: Carnegie Mellon Grand Prize.

BOBS RAMEN | HACKCMU Sep 2016

- Built an internet of things ramen preparer on a team of 4 freshmen.
- Programmed the microcontroller to direct servomotors and take network requests.
- *Winner*: Microsoft Mentor's Choice Award.

TEACHING EXPERIENCE

CMU MACHINE LEARNING DEPARTMENT | TEACHING ASSISTANT FOR INTRO TO ML (MASTER'S) Aug-Dec 2018

- Drafted assignments and tests, coordinated course logistics, and taught recitations.

CMU COMPUTER SCIENCE DEPARTMENT | TEACHING ASSISTANT FOR PRINCIPLES OF COMPUTING Jan-Dec 2017

- Instructed students in foundational computing concepts.