## **Education**

## **Carnegie Mellon University**

BS in Computer Science Minors: Human-Computer Interaction, Software Engineering May 2022, QPA: 3.5

### Relevant coursework:

- 15-210 Parallel and Sequential Data Structures and Algorithms\*
- 17-214 Principles of Software Construction\*
- 15-251 Great Ideas in Theoretical Computer Science
- 15-150 Functional Programming
- 15-122 Principles of Imperative Computation

Teaching: 15-122 (Fall 2019)

# **Allderdice High School**

May 2018, GPA: 4.0

# Skills

#### Languages:

Javascript, Python, HTML, CSS (7 years), Bash, Java (6 years), C (3 years)

### **Technologies:**

Git, Linux (7 years), React, MongoDB, Redis, PostgreSQL (3 years), Angular, Django (1 year)

# **Volunteering**

# **East Liberty Presbyterian Church** Tackling food insecurity

# **Allderdice High School** Math peer tutoring

# **Projects**

#### **ASSURE: CONNECTING NEEDS**

Implemented Node.js + MongoDB + React service to make local donations more accessible and secure at TartanHacks 2019.

#### **CMULAB: SECURE CHECK-IN AND SCORING**

Developing Node.js + MongoDB web service for teachers to score class activities.

★ Adopted by 15-122 at CMU.

#### FLOW: REAL-TIME WATER CONSUMPTION TRACKER

Created Node.js + Redis backend to predict water usage with ML algorithm.

★ 2nd place for Riot Games sponsor prize at HackCMU 2018

#### **MACHINE LEARNING ANALYSIS OF JUDICIAL RECORDS**

Used SciKit-Learn library and Python web scraper to collect 12 million case records. Created decision tree to predict future case outcomes with 81.4% test accuracy.

#### **AWESOMEBOT**

Built multi-purpose Node.js bot for managing over 10,000 online communities.

#### **IMGCAP: AUTOMATED IMAGE CAPTIONING**

Generated image captions on-the-fly to aid blind users. Written in Java + OpenCV. ★ 1st place at PA Junior Academy of Science | 2nd place at Pittsburgh Science Fair

# **Experience**

## **SOFTWARE ENGINEERING INTERN, BROADCOM**

May-Aug 2019

Contributed to Angular frontend, Kotlin + Spring backend, and Node.js scalable server testing harness for the Mainframe Team Center as part of an agile team.

### **TEACHING ASSISTANT, LEAP@CMU**

Jun 2015-Aug 2016

Taught local high school students computer science in 7-week summer program.

#### RESEARCH INTERN, CARNEGIE MELLON UNIVERSITY

Jun 2014-Jun 2015

Designed and developed plugin to increase user awareness of online tracking.

## **Activities**

### **GOOGLE TECH CHALLENGE**

**Apr 2019** 

★ 1st place team overall, including timed coding challenges and logic puzzles

#### PLAID UMBRELLA PROJECT

Sept 2018-Present

Technical and software lead. Coordinating with electrical and mechanical teams to build umbrella dispenser network, as well as Node.js + MongoDB backend system.

#### **THE TARTAN**

Sept 2018-Present

Editor for SciTech section. Writing and editing articles, designing weekly paper.

#### **SCOTTYLABS**

Sept 2018-Present

Gave introductory React talk at Web Dev Weekend 2018. Overhauled Python + Flask API to make printing accessible on-campus.