# **BRADLEY ZHOU**

917-573-5427 github.com/bradley-z bradleyzhou.me

bradley.m.zhou@gmail.com linkedin.com/in/bradleyzhou

### **EDUCATION**

# **Carnegie Mellon University**

B.S., Electrical and Computer Engineering, dec '20 minor in computer science

#### RELEVANT COURSEWORK

**Data Structures** Discrete Math Computer Systems **Embedded Systems Functional Programming** Parallel Computer Architecture Parallel and Sequential Data Structures and Algorithms

# **SKILLS**

#### **PROGRAMMING**

Proficient: C/C++, Python Familiar: SML, Java, x86 assembly, ARM assembly, SQL

# **TOOLS & FRAMEWORKS**

Unix, Git, HTML/CSS, Flask, Bootstrap, Jekyll

#### **HONORS**

**SWE Summit** auq '18 Capital One Dean's List may

Carnegie Mellon University

aug Presidential Scholarship 117 Carnegie Mellon University

# **LEADERSHIP**

#### **Club Tennis**

social chair

may '19 - present

#### **Asian Students Association**

head of public relations

dec '17 - dec '18

#### **EXPERIENCE**

**Facebook** menlo park, ca incoming production engineer intern sept '19 - dec '19

· Fall 2019

# **TransMarket Group**

chicago, il software engineer intern may '19 - aug '19 · Core systems development

Carnegie Mellon University pittsburgh, pa jan '19 - present teaching assistant

· Taught recitation, led review sessions, and hosted office hours for graduates and undergraduates taking 15-213: Introduction to Computer Systems

# Pittsburgh Supercomputing Center

pittsburgh, pa june '18 - aug '18

research intern

· Developed machine learning programs for computational studies of high entropy alloys

#### **PROJECTS**

# Threaded Garbage Collector

Thread-safe mark and sweep garbage collector for C implemented using fine-grained locking and pthreads to accelerate performance

## **Embedded Real Time Kernel**

Kernel run on a Raspberry Pi featuring serial I/O, threading, context swapping, a scheduler, and a mutex interface

# Website Prototyping System

Processes images using OpenCV to be sent via a React app to an API that transforms the hand-drawn layouts to dynamically render HTML/CSS in real-time

# **Podcast Engine**

Web app created with Flask to organize subscriptions, visualize popular podcasts, and get recommendations for new podcasts

## **HQ** Bot

Automates search of answers to questions from the popular gameshow trivia app "HQ" using Tesseract OCR and Google Search API

# **Multi-threaded Web Proxy**

Concurrent web proxy that forwards HTTP GET requests, caches web objects, and handles simultaneous connections

Updated 5/17/19