# **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, may '21 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, Python Familiar: C++, SML, Java, x86 assembly, ARM assembly, SQL

## **TOOLS & FRAMEWORKS**

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

### **HONORS**

**SWE Summit** aug '18 Capital One

may Dean's List

'18 Carnegie Mellon University

aug Presidential Scholarship

'17 Carnegie Mellon University

### **LEADERSHIP**

### **Club Tennis**

social chair

may '19 – present

### **Asian Students Association**

head of public relations

dec '17 - dec '18

### **EXPERIENCE**

# **Facebook**

incoming production engineer intern

· Fall 2019

### TransMarket Group

software engineer intern

chicago, il

menlo park, ca

sept '19 - dec '19

may '19 - aug '19 · Developed a system to streamline testing of core systems and trades by

- enabling users to submit jobs to run and benchmark their programs automatically while also removing the previous limitation of no concurrent users
- · Extended this system by creating a trade to benchmark latencies and integrating it into GitLab for regression testing

### Carnegie Mellon University

teaching assistant

pittsburgh, pa

jan '19 – may '19

· 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

research intern

june '18 – aug '18

· Developed statistical models using scikit-learn and TensorFlow to assist in 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