CHARLES WANG

🔀 charleszqwang@ucla.edu 🏻 📺 charleszqwang 🕠 charleszqwang 🦠 charleszqwang.github.io

Education

University of California, Los Angeles

Aug 2018 - Dec 2021

Computer Science B.S., Entrepreneurship Breadth GPA: 3.766

UCLA Upsilon Pi Epsilon Computer Science Honor Society, Dean's Honors List

Experience

Tesla - SWE Intern

Sept 2020 - Present

- Infotainment Media Team
- Developing automated testing for voice commands

Viasat - SWE Intern Jun 2020 - Sept 2020

- Designed and built an automated kubernetes log collection and visualization solution, minimizing usage of compute resources, and implemented one-click setup
- Ensured proposed design met security and policy specifications of multiple customer groups
- Created automation to repeatably deploy to on-premise and cloud clusters

Harmony Blockchain Protocol (www.harmony.one) - SWE Intern

Jul 2019 - Sept 2019

- Maintained an experimental blockchain network with almost 2500 participants and a peak decentralization of 77.8%
- Created internal tooling to compile live network metrics
- Developed Go metrics API to push network stats to Prometheus server

Daily Bruin - SWE Intern

Oct 2019 - Present

- The only central database of course/professors reviews and grade distributions at UCLA
- Integrating CI/CD process into existing website using Jenkins
- Manage deployment of site, including downtime recovery

Catalyst for Success - President

Aug 2015 - Jun 2018

- K-5 STEM education outreach 501(c)(3) nonprofit in the greater San Diego Area, maintaining active chapters in 4 high schools and holding events at 10 elementary schools along with community events at local libraries
- Established weekly coding sessions and wrote curricula for local elementary schools

Projects

RobinTicker

Electron, React, Flask

- Desktop Widget Stock Ticker with full Robinhood API integration to allow users to monitor portfolio and watchlist while using minimal screen space
- Designed and developed optimizations over Robinhood webapp to improve UX including more frequent price updates, better UI design, removal of excess bloat features
- Created with React frontend and Flask REST API backend packaged in Electron

TCP Simulator

C++

Implemented TCP Selective Repeat Protocol using UDP

Skills

Languages:

Python, C++/C, Go, Java, HTML/CSS, Javascript, Bash

Software & Tools:

Kubernetes, Docker, AWS, Electron, React, Git, Django, Flask, PostgreSQL, Helm, GKE, Fluentbit,

Rsyslog, Ansible, Jenkins, Prometheus, Bootstrap, Linux, Agile, Blockchain

Relevant Coursework

Networking, Programing Languages, Computer Architecture, Data Structures, Multivariable Calculus, Linear Algebra, Discrete Mathematics, Logic Design, OS Principles, Entrepreneurship