# LARYN QI

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#### **EDUCATION**

#### University of California, Berkeley

GPA: 3.80/4.0

B.A. Computer Science, B.A. Music | Upsilon Pi Epsilon (CS Honor Society) | Honors 2020-2021

May 2023

Relevant Coursework: Graduate Algorithms & Data Structures · Randomized Algorithms · Computability & Complexity · PL & Compilers · ML · OS · Security · Comp. Architecture · Data Sci. · VR Dev. · Lin. Alg. · Stochastic Processes · Signals & Circuits

### **EXPERIENCE**

Amazon

## **UC Berkeley EECS Instructor**

Berkeley, CA

CS 61A Lecturer - https://inst.eecs.berkelev.edu/~cs61a/su22/

June 2022 - August 2022

May 2021 - August 2021

- Delivered lectures, wrote exams, and hired & managed staff of 25+ TAs and Tutors and 50+ academic interns for class of 400+ students
- Taught CS fundamentals: abstraction, recursion, OOP, mutability, trees, linked lists, complexity, interpreters in Python, Scheme, and SQL

Software Development Engineer Intern, L4 (Threat Intelligence)

Seattle, WA

- · Built an intelligence collection service to improve threat discoverability and Analyst efficiency via fast searching through large datasets
- · Resulted in 30% improvement in the team's Analysts' efficiency, saving 300 person-hours a month at a cost of less than \$2/hour
- · Utilized serverless AWS infrastructure to support a highly scalable, cost-efficient, fault-tolerant, easily extensible, and secure architecture

#### **UC Berkeley EECS Course Staff**

Berkeley, CA

CS 61A Head TA · CS 61A TA · CS 61A Tutor · Outstanding CS 61A Academic Intern

January 2020 - Present

- · Managing recruitment, onboarding, weekly prep assignments, check-ins, socials, and general logistics for team of 120+ academic interns
- · Holding multiple weekly discussions, labs, and office hours & answered Ed forum questions for introductory CS class of 2000 students
- · Maintaining course software, infrastructure, and website, developing & reviewing assignments, proctoring & grading exams
- Average teaching effectiveness rating: 4.52/5.00

## Codebase <> Mothership, Codebase <> San Francisco Conservatory of Music

Berkeley, CA

Project Manager

December 2021 - January 2023

- · Sourcing & speccing data science/backend project for Mothership for serving carrier supply & shipment demand density in metro areas
- Leading team of 6 software developers through system architecture research, design doc, data analysis, service deployment, and testing
- · Creating ramp-up project & organizing weekly worksessions, planning meetings, retros, developer check-ins, client stand-ups, and socials

### Extended Reality at Berkeley

Berkeley, CA

Extended Reality Course Instructor

January 2020 - May 2021

- · Facilitated student-led XR course: gave lectures, developed new content, supervised final project, managed Piazza forum, graded
- · Hosted internal technical workshops to onboard new club members with XR, Unity, and C# to work on XR research projects

### Robot Open Autonomous Racing (ROAR)

Berkeley, CA

Undergraduate Researcher

October 2020 - December 2020

- · Worked under Dr. Allen Yang to simulate an autonomous racecar using CARLA as a software developer on the Map Making team
- · Scanned, processed, and cleaned pointcloud map data of Berkeley in MeshLab and ported mesh to Unreal Engine using Maya

#### **PROJECTS**

#### Codebase <> BlueConduit

Software Developer

August 2021 - January 2022

- Built an app for city officials to upload & visualize water service pipeline data for finding the optimal locations to replace service lines
- · Part of a larger, multimillion, open source collaboration project between BlueConduit and Google.org to support lead line replacements
- · Used Django REST framework & JSON web tokens to handle user authentication securely and Mapbox API for data visualization

#### Codebase <> Relativity Space

Software Developer

February 2021 - May 2021

- · Created standalone web app for Relativity Space to visualize real-time time-series data streaming from sensors on rockets into InfluxDB
- Full-stack: custom API, sockets, React dashboards, D3 graphs with custom absolute and relative timeranges & multiple data streams
- · Emphasized improved client and server performance over Grafana through backend data caching and shared global state in frontend

#### ok-disc

Software Developer – <a href="https://github.com/LarvnOi/ok-disc">https://github.com/LarvnOi/ok-disc</a>

July 2020 - January 2021

- · A lightweight Python client for students to autograde and debug their Python, Scheme, and SQL code during virtual discussion sections
- · Simple CLI for running test cases and displaying expected & actual output with support for assignments in multiple languages
- Used by 330+ UC Berkeley intro CS students through Computer Science Mentors, a teaching/tutoring student organization on campus

## SKILLS

<u>Languages/Frameworks</u>: Python · Java · SQL · C · Go · Java/TypeScript · OCaml · React · Vue · HTML/CSS · Max · Assembly · Lisp <u>Tools</u>: Git · AWS · GCP · Unix · Linux · Docker · Heroku · Express · MongoDB · InfluxDB · Flask · Django · pandas · NumPy · Matplot <u>Other</u>: LaTeX · Mandarin (conversational) · French (conversational)