Collin Qian

408-624-6881 | qian.collin@gmail.com | $\underline{\text{Linkedin}}$ | $\underline{\text{Github}}$ | $\underline{\text{Website}}$

EDUCATION

University of California, Santa Barbara — GPA: 3.95

Sep 2021–Dec 2024

Bachelor of Science in Computer Science, Minor in Mathematics

Santa Barbara, CA

Awards & Activities: SB Hacks XI (1st Place), 2024 Jumpstart Designation (1st Place), Inter-Collegiate Programming Contest (ICPC) Regional Qualifier (Top 10), UCSB CodersSB Blockchain Project Series (1st Place), TeamsCode Summer 2023 Programming Contest (Top 10)

Skills & Tech Stack: C/C++, Python, Java, Node.js, React.js, Django, Flask, GCP, GraphQL, PyTorch, Swift, Git, CUDA, SQL, Apache Spark, OCaml, Scala, PyTorch, Tensorflow, Databricks, Delta Lake

Experience

Databricks, Inc.

Jun 2024-Sep 2024

Software Engineer Intern

Mountain View, CA

- Engineered an automated cost pipeline to retrieve periodic cost reports from Oracle Cloud Infrastructure (OCI), streamlining processes for internal teams and saving business analysis teams 30+ minutes of manual effort daily
- \bullet Collaborated with product finance teams to optimize the cloud cost Delta Table format by 20% for data analysis
- Forecasted OCI costs for 50+ internal teams using linear regression, enabling teams to monitor their spendings
- Automated a daily alert for internal teams who exceeded their forecasted monthly OCI cost, saving 20% in costs

Amazon, Inc. Jun 2023–Sep 2023

Software Development Engineer Intern

Sunnyvale, CA

- Implemented the Smart Home Widget with Alexa Presentation Language for Amazon Smart Vehicles' in-vehicle infotainment system; collaborated with the external manufacturing team to ensure customer satisfaction of 90%
- Designed and implemented the Weather Forecast Card feature for the Weather Widget using Alexa Skill Connections, working closely with the UI/UX team to enhance user experience by 20% through iterative testing
- Developed and executed comprehensive 10+ unit and integration tests in Java for the IVI backend, enhancing code reliability and contributing to a 15% reduction in defects, thereby improving overall code quality and stability

Benioff Ocean Science Laboratory

Nov 2022–Jun 2023

Software Engineer Intern

Santa Barbara, CA

- Automated a Google Cloud Function to post daily WhaleSafe_CA and WhaleSafe_SF tweets (image & text) which incorporated WhaleSafe API metadata, increasing Twitter account engagement by 200% within the first month
- Evaluated a YoloV7 machine learning object detection model for marking sharks in video utilizing NumPy and PyTorch. Improved the overall performance of the model by 20% through iterative optimization and fine-tuning
- Harnessed PostgreSQL and SQLAlchemy to migrate an API onto GCP's Cloud Functions and Cloud Storage

Intuitive Surgical, Inc.

Jun 2022–Sep 2022

Software Engineer Intern

Goleta, CA

- Spearheaded the Session Quality Quantitative Metric for Intuitive's Telepresence software which measured the quality of 100+ surgical and business calls, and wielded Selenium for end-to-end testing of the VOIP sessions
- \bullet Utilized Visual Basic and GraphQL to calculate call metrics to increase detection of low-grade sessions by 75%
- Implemented automation test scripts utilizing Sikuli to validate 10+ test cases, reducing manual effort by 50%

Projects

SnapSell (SB Hacks XI Grand Prize) | Next. JS, Gemini, Anthropic, Selenium, Flask

Jan 2025-Jan 2025

- Engineered automation system that transforms a video walkthrough into multiple Facebook Marketplace listings
- Implemented computer vision pipeline using Google Gemini API to extract product details from video input
- Developed an AI chat agent, handling buyer inquiries, price negotiations, and scheduling (with Google Calendar)

Twitter BERT (NLP Course) | Python, Hugging Face Transformers, PyTorch

Jun 2023–Jun 2023

• Enhanced and optimized a BERT model for effective Named Entity Recognition of tweets, achieved 70% accuracy

Minz (LA Hacks) | Swift, Flask, Git, Cohere API, UCSB API, Google Firebase

Apr 2023–Apr 2023

• Built iOS app that matches students to courses and other students based on interests and schedules respectively

Ask3 (CodersSB Project Series 1st Place) | React, Ruby on Rails, Solidity, Moralis

Apr 2022–Jun 2022

• Architected a decentralized Q&A platform, enabling users to post academic questions with cryptocurrency bounties