Education

B.S. Computer Science & Minor in Mathematics California State University, Fullerton **Mathematics, AS-T** Pasadena City College

May 2023

May 2020

Experience

Amazon, Consumer Division: Personalization Software Development Intern

May 2022 - August 2022

- Designed and developed an API to create datasets of high confidence mapping data using data from Ground Truth
- Datasets were used to train and analyze the performance of our models, saving \$4500 per month in data labeling costs
- Developed automations to transform and upload labeling data in response to a completed Ground Truth job
- · Parallelized dataset uploads with multithreaded insertions, increasing upload performance
- Designed and implemented a DynamoDB schema to store and query labeled datasets
- Wrote unit tests and integration tests with 100% branch and statement coverage where applicable
- Configured a CI/CD pipeline for automated deployments and provisioned AWS resources using CloudFormation

Association for Computing Machinery at CSUF Historian, Website Developer

April 2021 - Present

- Developed features on the blog including read time estimates and syntax highlighting on code blocks
- Wrote articles on the blog, educating members about topics not frequently taught in classes
- Mentored and onboarded new developers by writing documentation and checking in regularly to discuss blockers
- Performed code reviews and provided feedback on pull requests from other project contributors, ensuring a high quality codebase and teaching web development best practices

TuffyHacks 2022 Website Developer

September 2021 - February 2022

- Built a mobile responsive hackathon landing page using React to promote the event, reaching 1000+ students globally
- Developed the hacker dashboard for participants to join and create teams
- Designed a PostgreSQL database to replace the Firestore database, allowing us to scale to our 300 user target while reducing our effective hosting costs to \$0
- Created API endpoints using serverless functions, allowing hackers to create and join teams via invite link

PCC Learning Assistance Center Computer Science Learning Assistant

January 2019 - December 2020

- Worked one-on-one with 40+ students for 150+ sessions to teach computer science concepts
- Served as TA for 3 courses to help improve lectures and build long term study habits within students
- Assisted and advised staff on the transition to remote tutoring during the COVID-19 pandemic

Projects

Spotify Seasonal Playlist Sorter Javascript, Python (Flask, Spotify REST API)

April 2020

- Co-developed a web service that places liked songs into playlists grouped by seasons, currently serving 20+ users
- Developed and designed the frontend and deployed the app onto AWS Lambda functions
- Designed a SQL database allowing for error logging, token storage, and playlist caching, minimizing API calls
- · Rearchitected and rebuilt the service with serverless technologies, reducing maintenance and eliminating hosting fees

SQLite Clone C++

June 2019

- Developed a relational database management system that supports a subset of SQL commands
- Implemented a B+Tree to index database entries for fast querying
- Implemented an SQL command parser with syntax error checking

Sushi Shop Java (Swing, JavaFX)

May 2017

- Led a team to develop a sushi making game where players are given a randomized sushi order and must move a plate to catch falling ingredients to construct the order
- Developed the graphics engine capable of rendering simple 2D sprites

Skills

Languages: Python, C++, Java, JavaScript/TypeScript, HTML/CSS, LATEX, Dart, SQL, R, MATLAB

Frontend/Mobile: React (Next.js, Gatsby), Svelte, Three.js, React Native, Flutter

Backend: Express.js, Flask/FastAPI, Node.js, Docker, PostgreSQL, SQLite, MySQL, Prisma

DevOps: Amazon Web Services (API Gateway, CDK, CloudFormation, DynamoDB, Lambda, S3), Docker, NGINX