

Education

B.S. Computer Science & Minor in Mathematics *California State University, Fullerton*

May 2023

A.S. Mathematics *Pasadena City College*

May 2020

Experience

Amazon, Personalization *Software Development Engineer Intern*

May 2022 - August 2022

- Design and develop systems that process thousands of data points to create high confidence "golden datasets"
- Train, analyze, and improve model performance resulting in reduced overhead and minimizing data labeling costs
- Develop automations to process, transform, and upload labeling data in response to a completed Ground Truth job
- Parallelized dataset uploads with multithreaded insertions, increasing upload performance and throughput
- Design and implement a DynamoDB schema to store and query labeled datasets
- Implement unit and integration tests with 100% branch and statement coverage where applicable
- Configure and deploy the CI/CD infrastructure in TypeScript through AWS CDK and CloudFormation

Association for Computing Machinery at CSUF *Historian, Website Developer*

April 2021 - Present

- Serve as official board member for the largest Computer Science club on campus
- Develop useful features for blog entries including read time estimates and syntax highlighting on code blocks
- Construct informative articles informing students about complex topics not frequently taught in classes
- Perform thoughtful code review by giving meaningful feedback and inciting discussion on Web Development best practices
- Mentor budding developers by writing useful documentation and providing helpful pointers

TuffyHacks 2022 *Website Developer*

September 2021 - February 2022

- Built mobile responsive web frontends using React.js, primarily the landing page, promoting the event to thousands of students, and the dashboard, facilitating team creation and displaying live event announcements
- Design scalable and fault tolerant backend using serverless technologies and a PostgreSQL database, staying within cloud computing free tiers while effortlessly handling peak traffic from hundreds of users with 100% uptime during the event

Nex-ii LLC, Twiine *Full Stack Developer*

June 2020 - September 2020

- Built the MVP of a date and hangout planning mobile app using Flutter. Most notably, developed the planning and user profile pages, with support for live updates when requests are accepted and profiles are updated
- Develop login and signup flow with OpenID and OAuth support for Google, Facebook, and Email authentication
- Design and implement the API endpoints allowing users to schedule hangouts and send invitations to other users

Projects

Pathfinder *Javascript (Svelte, TailwindCSS)*

December 2022

- Develop an interactive web app that demonstrates and compares the realtime performance of various different pathfinding algorithms, allowing users to see how they work and understand their strengths and limitations.
- Implement visualizations for Depth-First Search, Breadth-First Search, Dijkstra's Algorithm, and A* Search Algorithm
- Create fluid CSS animations to better visualize the progression of each algorithm

Spam Email Classifier *Python (Scikit-Learn, Natural Language Toolkit)*

November 2022

- Design and implement a machine learning based spam email classifier using Python and scikit-learn
- Trained the classifier on a dataset of labeled emails, achieving an accuracy of 98.95% and an F1 score of 97.74% on the testing dataset using the Naive Bayes Classifier

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

April 2020

- Co-develop a web service that places liked songs into playlists grouped by seasons, currently serving 20+ users
- Develop and design a landing page and deployed the app onto AWS Lambda functions
- Integrate with a SQL database for error logging and playlist caching, minimizing API calls and monitoring error rates

Skills

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

Data Analysis/Machine Learning: Jupyter Notebook, Scikit-Learn, Numpy, Pandas, Pytorch, Keras

Frontend: React (Next.js, Gatsby), Svelte, TailwindCSS, SCSS, 11ty

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

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