

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

- Develop systems that process thousands of labeled binary data points to create high confidence datasets
- Train, analyze, and improve model performance resulting in reduced overhead and minimizing data labeling costs
- 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 - December 2022

- 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
- Mentor budding developers by writing useful documentation and providing helpful pointers

TuffyHacks 2022 *Website Developer*

September 2021 - February 2022

- Built mobile responsive frontend using React (Next.js), primarily the landing page, promoting the event to thousands of students globally, and the dashboard, facilitating team creation and displaying live event announcements
- Design scalable and fault tolerant backend using AWS Lambda functions and a PostgreSQL database, minimizing cloud hosting fees while handling peak traffic from hundreds of users with 100% uptime and minimal latency 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

PositivityPost | Treehacks 2023 Submission *Typescript, Svelte, TailwindCSS*

February 2023

- Website that aggregates news from multiple sources and categorizes each article as "positive" or "negative"
- Implement the sentiment analysis algorithm to classify news with a "sentiment score" using the AFINN-165 lexicon
- Design user-friendly frontend allowing users to quickly filter and tailor their news feed based on topics and sentiments

Pathfinder *Typescript, Svelte, TailwindCSS*

December 2022

- 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
- Train model on a dataset of labeled emails, achieving a precision of 98% and a recall of 97% with the Naive Bayes Classifier

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

April 2020

- Develop a service that places liked songs into playlists grouped by seasons, currently serving 20+ users
- Integrate with a SQL database for error logging and playlist caching, minimizing API calls and monitoring error rates

Skills

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

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

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

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

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