

## 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 database 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, CSUF ECS Competition** Typescript, Svelte, TailwindCSS

February 2023

- Aggregates news from multiple sources to provide a more balanced and less biased view of the news
- Utilize sentiment analysis and language models to group and summarize coverage of newsworthy events
- 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<sup>A</sup>T<sub>E</sub>X, 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