Kaden Weber

Linkedin | GitHub | Source

Education

BS in Computer Science, with Arabic Minor

Brigham Young University, Provo, UT

September 2016 - April 2020, GPA: 3.6

Selected Coursework:

- Deep Learning
- Software Engineering
- Web Programming
- Technical Communication
- Image Processing
- System Programming
- User Experience
- Computer Security

Professional Experience

Contract Software Engineer

San Diego Association of Governments

Remote, February 2020 – Present

- Built a <u>python framework from scratch</u> for an UrbanSim inspired real estate supply allocation model tailored specifically for a client county's data
- Managed large geo-datasets with Pandas and ArcPy
- Rescued an older modeling program by creating a cross platform build

Co-Founder and CTO

Canary Safety

Provo, UT, January 2020 - Present

- Interviewed potential customers to continually tailor business model and user experience
- Designed MVP enterprise software product offering
- Audited secure and robust application architecture
- Developed an entire software stack: Vue.js, AWS Amplify (GraphQL), Lambda, Cognito and DynamoDB
- Awarded \$15,000 as a Miller New Venture Challenge winner

Research Assistant

Brigham Young University

Provo, UT, January 2019 – April 2020

- Developed a prototype Android app to detect figure skating jumps with a simple algorithm using real-time data from an IMU
- Created a WearOS app for exporting smartwatch motion sensor data to use for ML training data
- Evaluated machine learning algorithms best suited to detect and differentiate figure skating jumps

Engineering Intern

Showpad

Chicago, IL, May 2019 - August 2019

- Wrote and tested production swift and Objective-C code for an enterprise iOS application
- Implemented an experimental microservice in Kotlin's Ktor framework and deployed it with Docker and Kubernetes

WordCruncher MacOS Developer

Brigham Young University

Provo, UT, January 2018 – January 2019

• Caught up an industry-specific solution to a modern MVC architecture in Swift by translating thousands of lines of C++

Projects

BYU Mars Rover Team — University Rover Challenge

September 2019 – April 2020

- Improved and prepared a <u>rover</u> for a <u>world-wide competition</u> with 30 of the best prepared students from Brigham Young University
- Maintained a mid-sized codebase, implemented source control standards and best practices, performed code reviews, wrote unit tests
- Automated networking and rover setup using bash and python scripts, used ROS messaging to connect Cameras, GPS, and other sensors
- Improved autonomous search algorithms for finding waypoints and recognizing markers

Ascendant Anxiety Tracker

January 2020 – April 2020

• Working to quickly bring iOS app to market, wrote production quality code using newest frameworks like SwiftUI and Combine

• Implemented local datastore using GRDB

Crocker Innovation Fellow

January 2019 – December 2019

- Chosen as one of five juniors to represent the CS major at BYU and created innovative products as part of a cross-disciplinary entrepreneurship program
- In two weeks, wrote a <u>remote control app</u> for a scale model 3-wheeled omni wheelchair that sends wheel commands to an arduino over bluetooth and reports RFID tags to a server

MJPianos.com

January 2018

- Set up a business website for a friend, currently draws nearly 200 unique visitors per month
- Optimized SEO, organic search now accounts for 30% of traffic

Personal

- Brigham Young University Heritage Scholarship Recipient
- Stanford HSSC alumni
- Second-degree black-belt helped teach younger kids for five years
- Fluent in German, conversational in Arabic