CYPRESS M FRANKENFELD

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Summary

Self motivated Engineer with unique combination of full-stack and Android experience, and highly effective people skills. Rigorous educational background with project based curriculum and a hands on approach. Recognized for eagerness and success in learning new technical skills. Effective at starting and finishing large technical projects.

Skills

Languages of choice are **Rust, Java,** and **Typescript**. Experienced with **PostgreSQL** and **MySQL**. Some experience with Python, and JavaScript. Adept at learning new languages and frameworks.

VS Code, **IntelliJ IDEA / Android Studio**, Jupyter Notebooks, paper-prototyping, Balsamiq, and HTML/CSS for non-trivial projects.

Very proficient in **React** and **backend server development**

Years of experience in **Android development**, but not up-to-date on the latest frameworks

Employment

2020-present

MIT Joint Program on the Science and Policy of Global Change, Cambridge MA
Software Engineer
Worked with climate scientists for a project sponsored by the Department of Energy to display time-series and geographic data to help decision-makers identify counties that are at-risk and vulnerable from climate change.

- Learned Rust and built the backend REST service using a Rust-based web framework

- Designed the database schema, and set up a PostgreSQL database

- Built an interactive choropleth map website using React and typescript. Learned Svelte and compared tradeoffs in performance and maintainability

- Automated deployments and database migrations with Github actions and containers

2018-2020

HubSpot, Cambridge MA
Senior Software Engineer   Oct 2018-Feb 2020
Software Engineer   Jan 2018-Oct 2018
Built and maintained the backend for a web app that helps marketers with SEO.

- Added an integration with Google Search Console to allow marketers to see detailed statistics about how they are being found on google. This integration has been installed by over 10,000 customers and is gaining over 100 new users per day.

- Worked with the ML team to add a feature to automatically group similar blog posts. It helped marketers quickly organize their website, which they would ordinarily need to do manually. Product activation rose by 4% after implementing this feature.

- Sped up the page load times for our SEO dashboard, the main part of our app, something we had multiple customer complaints about. I made the worst-case load time 350x faster, from from 60s to 180ms.

- Learned how to use python data visualization libraries such as pandas with Jupyter Notebooks to quickly prototype tests on customer data to look for areas to improve

- Identified and fixed an issue with an authorization library when the maintainers were shorthanded. The fix improved customer security and privacy

- Responded to critical on-call issues as part of the authentication team to keep the website secure from bad actors and threats

June 2017	**Intrepid Pursuits**, Cambridge MA
	Independent Contractor
	Recruited to join Android project team at the tail end with only 3 weeks left to meet deadline. Contributed in finishing the project by the deadline. Worked with team of 5 developers.
2014-2017	**Onshape**, Cambridge MA
	Software Engineer
	Built and maintained an Android app that helps mechanical engineers design products. Added features to web app that help manage complex mechanical engineering projects.

- Collaborated in the building of fully functional 3D CAD Android app which received 50K downloads within 3 years.

- Influenced the quality of the app by driving the company focus on user-friendly design, achieving a 4.4/5 rating on the Google Play Store

- Kept app feature complete with desktop version

- Selected to mentor 2 interns the first year and 1 intern the second year in addition to interviewing new candidates for Android programming positions

- Attended weekly book club specifically created to learn new programming topics in a group setting

- Created a prototype for a new feature of the app based on user input and pitched the idea to the whole company which was enthusiastically received by management and peers

- Worked on data management features of our web app which are intended to attract larger enterprise customers and increase revenue

Summer 2013	**Sookbox**, Cambridge MA
	Software Developer Intern
	Initiated a redesign of their iOS app, wrote an API to interface JavaScript with Objective-C, created a debugging tool using Flask and JavaScript to test an internal API, and improved stability of the python back-end and iOS app.
Summer 2012	**NeuroScouting**, Cambridge MA
	Software Developer Intern
	Designed and built three web tools for data visualization with a Django back-end and a custom JavaScript/HTML graphics front-end.
Summer 2011	**NASA**, Needham MA
	Electrical Engineering and Software Developer Intern
	Helped build a digital X-ray transmission system and a thermoelectric cooler controller for a pico weather satellite.

Additional Experience

2010	**Lawrence Arts Center**, Lawrence KS
	Tap Dance Teacher
	Designed and taught a tap dance class at the Lawrence Arts Center.
2008-2009	**Lawrence Piano Studio**, Lawrence KS
	Assistant Piano Teacher
	Taught piano under the guidance of a senior piano instructor.

Group Projects

2013- 2014	**Senior Capstone Project with Facebook**
	Researched and prototyped an Android app to help people communicate in areas of the world where network connectivity is poor. The concept app reduced newsfeed data consumption via peer-to-peer connections.

Sep-Dec 2012	**Prototype Fitness App**
	Designed a prototype app for fitness trainers to easily log their clients workouts, working through the entire user interaction design process.
Sep-Dec 2011	**Autonomous Glider**
	Programmed a closed loop autopilot capable of turning and leveling out before landing.
Jan-May 2011	**Weather Balloon Launch**
	Attached a payload with cameras, thermometers, and barometers to a weather balloon, which successfully ascended over 80,000 feet before bursting and safely parachuting the equipment to the ground.

Education

2021-2022	**MIT**, Cambridge MA	GPA: 5.0
	Admitted to the Advanced Study Program to take *Intro to Machine Learning* and *Underactuated Robotics*.
2010-2014	**Olin College of Engineering**, Needham MA	GPA: 3.80
	BS in Engineering with a concentration in computer science. Received half-tuition merit scholarship.
Summer 2009	**University of Pennsylvania**, Philadelphia PA	GPA: 4.0
	Received full $5,650 merit scholarship for the Summer Academy in Applied Science and Technology to learn object oriented programming with Java