I'm a full-stack software developer with experience teaching engineers, leading teams, and developing a curriculum. I am looking to make a positive impact, seeking to join a team with meaningful values and a culture of collaboration.

#### LANGUAGES AND PLATFORMS

Languages	Strong in JavaScript (10 yrs), TypeScript, Python, C, and experienced in C#, Java, C++, PHP.
Frameworks	React, Redux, Node, Lambda, Responsive HTML5/CSS3, Git, PyTorch AI/Machine Learning.
Basic Tools	Shell scripts, Linux, Git/GitHub, Figma, Photoshop, Jira, Jenkins CI/CD, S3/IAM, Visual Studio.
Platforms	Linux, AWS Amazon Web Services, EC2/S3/IAM, API/REST/services, Google Cloud, Azure.
Summary	Experience teaching complex computer sci. concepts, writing curriculum material, paid tutoring, coaching/mentoring, building products, and solving problems with well-designed code.

## EXPERIENCE

#### • Freelance

Senior Software Engineer

#### • Made an engaging website where customers can drag-and-drop hundreds of components to style their purchases. Full-stack, built entire site incl. user auth., credit card payment, UI. [JavaScript, React, HTML5, CSS3, Node]

- DevOps deploying to production, initializing+securing servers for clients, logging/monitoring. [Express, NGINX]
- Designed, created an online system for scheduling parent-teacher conferences. Used successfully by school district for 5 years. Gathered requirements from clients and teachers, designed website with UX principles to fit user needs.

#### • Kibo School

Curriculum Developer

- Designed and developed curriculum. Wrote the textbook and material (including scripting+recording videos, interactive quizzes, images/diagrams) for a college-level ECTS-accredited Software Development course.
- Authored inspiring and original assignment projects, realistic examples that taught students computer science concepts incl. databases, servers/requests, OOP, arrays, data structures. [Python, API Design, GitHub Actions]
- Collaborated with an international team to adapt material for Kibo's students in Nigeria, Ghana, and Kenya.
- Used educational software (e.g. GitHub Classroom, Gradescope, Replit), graded assignments.

#### • Lively Health Savings Accounts

Senior Software Engineer, Tech Lead

- $\circ~$  Tech Lead for team of 5 developers.
- Taught engineers React best-practices, coached and mentored devs, guided team through the Agile sprint process.
- Shipped business-critical features and UI, e.g. for account holder's debit card management incl. web frontend.
- $\circ$  In 2 years, Lively climbed from a top 30 to top 10 health-savings provider, with assets managed > \$500 million.

Senior Software Engineer

- Taught a series of classes to engineers. Gave lectures and interactive demonstrations on important security considerations when developing software in JavaScript and when exposing internet APIs.
- Subject matter expert on 1/3 of codebase. Attentive/constructive code review. Owned all code running Visa payment processing. Wrote reliable logic for monetary transfers + monitoring. [TypeScript, PostgreSQL, AWS]
- Significantly improved product (e.g., +8% purchases processed without user intervention). Communicated clearly, collaborated with PM on new enhancements. [AWS Lambda, EC2, DynamoDB, Linux/systemd, service design]

Full Stack Software Engineer

11/2020 - 07/2021

San Francisco, CA, Remote 05/2022 - 11/2022

07/2021 - 05/2022

[Express, NGINX]

New York, NY, Remote

11/2022 - 4/2023 (Short-term Contract)

Current Role

• Highlight: designed, implemented, shipped complex Zendesk API integration. Tests, documentation, logs, analytics. Valuable impact, presented to all-hands meeting. [TypeScript, Node, React, queues+concurrent jobs]

## • ViperCard

Project Founder, Software Engineer

- $\circ$  Made an online platform where anyone can create interactive apps that resemble the 1980s Classic Macintosh UI.
- #1 on Hacker News, and featured in Vice Motherboard, the Register UK, C't Magazine. Funded by donations.
- Several tutorial videos. Wrote all code including parser/grammar, bitmap editor, in-browser code editor.Modern methodologies (design patterns, layering, unit tests). [HTML5, CSS3, TypeScript, Python+Flask, Google Cloud]

#### • Microsoft

 $Software \ Development \ Engineer$ 

- Over two years, studied an inefficient data cache, successfully rewrote it. [C++, performance, database design]
- $\circ~$  Every server file opened by Word, Excel and PowerPoint relies on this code.
- Wrote enhancement so that MS Word Win8 App saves files 11% faster. Created prototype MSWord build that edits over peer-to-peer [C++, C#]. Learned significant engineering best-practices from talented devs.

## Education

#### • Olin College

Bachelor of Science in Engineering: Computing Studied algorithms, fpga, interface design and human factors, functional programming

 Published research: Andrew Barry, Benjamin Fisher, Mark L. Chang, "A Long-Duration Study of User-Trained 802.11 Localization," *Proceedings of the Second ACM International Workshop on Mobile Entity Localization and Tracking in GPS-less Environments (MELT 09)*, 197-212, September 2009.

## Areas of Interest

#### • Open Source

- Active maintainer of the SciTE code editor's official repo for plugins and language translations. Over the past 10 years, coordinated with 29 international authors who added 77 PR contributions.
- Projects posted at https://github.com/moltenform and described at https://moltenform.com
- Contributed accepted bug fixes for more than 12 open source projects, and made a small GEdit plugin that was briefly popular. Proficient in Linux environments and Git+GitHub.

#### • Other Interests

• Gathering friends together over a home-cooked meal, writing music, making dark chocolate candies.

*01/2017 - 11/2020* ssic Macintosh UI.

Redmond, WA

06/2010 - 03/2015

Needham, MA 08/2006 - 05/2010

# Seattle, WA