

Ben Fisher

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I build and ship software. I care deeply about user experience and technical communication, and am talented in developing abstraction layers that are practical, extensible, and testable. I seek to join a team that values inclusivity and technical excellence, and aim to build software that helps people in meaningful ways.

EXPERIENCE

• ViperCard

Project Founder

Seattle, WA

2017-2020

- **Overview:** Made an online platform where anyone can create interactive black-and-white apps that resemble Classic Macintosh UI. Successfully crowdfunded, #1 on Hacker News. Featured in Vice Motherboard, Register UK, c't Magazine, and more; mentioned on de.wikipedia.org. Scalable backend leveraging Google Cloud, Datastore.
- **More:** Re-implemented UI elements and text editing from scratch for pixel-perfect fidelity with 1987. Modular design, test-driven-development principles, GitHub issue tracker, automated builds and deployment. Built script interpreter, grammar, bitmap editor, and in-browser code editor with TypeScript, HTML5, and CSS3.

• Microsoft

Software Development Engineer

Redmond, WA

2010-2015

- **IO Cache:** Dissected an inefficient data storage system and successfully replaced it with a new indexed database and C++ layer, over two years. Every server file opened by Word, Excel and PowerPoint depends on this code. Frequent communication to be in tandem with partner teams.
- **Performance Optimization:** Designed/implemented a strategy for reducing network calls in MS Office based on user activity, connection cost, battery status. Modular design to enable isolated unit tests. Named a “performance driver” for team; authored a fix so that the MS Word immersive app could save typical files 11% faster. Analyzed performance of MS Office code, discovered and resolved defects causing latency & undue resource use.

Software Development Engineer Internship

2009

- **P2P Multi-Editor Authoring:** Created a working prototype build of MS Word that sends collaborative editing changes over peer-to-peer. Sole developer for project, includes UI written in C++ and Windows Win32 API. By eliminating calls through a central server, enables improved latency and significant gains for server COGS.

• Avid Technology

Software Engineer Internship

Tewksbury, MA

2008

- **Media Composer:** Thoroughly ported a C++ codebase of graphics and audio engines to be correct/secure when targeting 64-bit (x86-64). Wrote Python scripts to automate updating makefiles. Both gcc+msvc compatibility.

EDUCATION

• Olin College

Bachelor of Science in Engineering: Computing. GPA: 3.79

Needham, MA

2006-2010

Full-tuition scholarship. Studies included FPGA, functional programming, user oriented design.

AREAS OF STRENGTH AND ADDITIONAL PROJECTS

JavaScript	2016-2020, built websites for clients. Webapps, data visualization, ReactJS, AWS Lambda.
C, C++	Glacial Backup, passion project in C, Linux/Win32, uploads to Amazon Glacier (AWS). In Boston, worked for Machine Science Incorporated, helping teach C and electronic circuitry.
LAMP	Designed/implemented an online system for registering and scheduling parent-teacher conferences, keeping in mind user needs regarding tech accessibility/literacy and the district's requirements. Linux/Apache/MySQL/PHP. Used by Ferndale School District for 5 years.
Python	Forked SciTE (Scintilla) code editor and embedded Python for scriptability, adding several new features. Maintained the official SciTE open source repo for plugins and translations for 9 years. Reviewed and accepted 73 PRs from 26 authors.
Research	Andrew Barry, Benjamin Fisher, Mark L. Chang, “A Long-Duration Study of User-Trained 802.11 Localization,” <i>Proceedings of the Second ACM International Workshop on Mobile Entity Localization and Tracking in GPS-less Environments</i> (MELT 09), 197-212, September 2009. Awarded best paper.