Brandon Michael Fong

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EXPERIENCE

Lead Software Engineer (Languages: C, C++, Obj-C, Swift, Bash) **Dec 2020 – Present**
Other World Computing - *Mill Valley*, CA

- Resolved critical issues in driver code for SoftRAID that affected 100,000+ users, ensuring optimal system performance and stability
- Re-architected the codebase for Copy That, reducing code complexity
- Fulfilled 1000+ feature requests, applied 1000+ bug fixes, and implemented 100+ enhancements to improve product functionality and reliability for SoftRAID & Copy That
- Participated in weekly key meetings, contributing insights and technical expertise to drive decision-making across multiple projects
- Made over 100+ decisions on the direction of the macOS application Copy That, puting the application in a competitive front in terms of speed and reliability against competitors like ShotPutPro
- Volunteered to assist other teams with build processes, demonstrating proficiency in scripting languages such as Bash, Zshell, and Python
- Collaborated with other teams to triage macOS-specific issues, leveraging in-depth knowledge of macOS platform intricacies
- Contributed to the development and release of applications for Windows and macOS for other teams
- Automated a firmware updating workflow that updated 500,000+ hard drives

Lite weight HTTP Server (Languages: C++) **Feb 2025 – Present**
Github: https://github.com/BrandonMFong/http

- Spearheaded the development solely out of curiosity on how http servers work
- Currently serves my website: https://brandonmfong.com
- Followed standard HTTP documentation provided by Mozilla, successfully serving static content

Command Line Instant Messenger (Languages: C++) **June 2018 – Present**
Github: https://github.com/BrandonMFong/chat

- Developed a minimalist, encrypted command-line chat inspired by the Nintendo's PictoChat
- Utilized libraries like NCurses and OpenSSL for command line UI and end-to-end encryption respectively
- Designed application with a scalability factor that can support 100+ users across Unix-like platforms

Unix cp alternative written in rust (Languages: Rust) **Nov 2024 – Present**
Github: https://github.com/BrandonMFong/cpy

- Inspired by the idea of learning the Rust language, made a goal to replicate the unix cp cli tool
- Utilized public crates for hash calculations, progress bar display, and concurrent queues
- Optimized performance using Rust's std::thread tools

EDUCATION

Master of Science in Electrical and Computer Engineering **Aug 2020 - Dec 2021**
Sonoma State University - Rohnert Park, CA
Finished the program in less than two years in the accelerated track while also working a full time job at Other World Computing

Bachelor of Science in Computer Engineering **Aug 2015 - May 2020**
San Diego State University - San Diego, CA

SKILLS

- **Languages**: C, C++, Obj-C, Swift, Python, Golang, Rust, Bash, Zshell
- **Frameworks/Libraries**: Core Foundation, DriverKit, IOKit, Openssl, Ncurses, Pthreads
- **Technologies**: lldb, gdb, Unit Testing, CI/CD, Makefile, SSH, Linux, TCP/UDP
- **Other**: Linear Algebra, Machine Learning, Microsoft Office, TrueNAS