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 <u>SoftRAID</u> that affected 100,000+ users, ensuring optimal system performance and stability
- Re-architected the codebase for <u>Copy That</u>, reducing code complexity
- Fulfilled 1000+ feature requests, applied 5000+ 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 decisionmaking across multiple projects
- Made over 100+ decisions on the direction of the macOS application <u>Copy That</u>, puting the application in a competitive front in terms of speed and reliability against competitors like <u>ShotPutPro</u>
- 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

Command Line Instant Messenger (Languages: C++)

June 2022 - 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

Command Line Alias Navigator (Languages: Rust, Bash, Zshell)

June 2018 - Present

Github: https://github.com/BrandonMFong/goto

- Implemented the concept of another project named <u>goto</u> in the Rust language, taking advantage of the performance of a compiled language and the cross platform support
- Designed to support alias relationships with 1000+ directories in your file system

Package Manager (Languages: Python)

Dec 2024 - Present

Github: https://github.com/BrandonMFong/bft

- Developed a python tool to manage other tool installation using modules like requests, tarfile, & dmblib
- Utilized github APIs to manage and monitor supported packages
- Optimized request count to ensure the tool stays within github APIs rate limit

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: Ildb, gdb, Unit Testing, CI/CD, Makefile, SSH, Linux, TCP/UDP
- Other: Linear Algebra, Machine Learning, Microsoft Office, TrueNAS