

Moon Davé

Senior Software Engineer

Contact:

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Skills

Swift, Obj-C, C/C++, Metal, GLSL, Go, JavaScript, Python, Linux, High performance computing

Relevant Experience

Electra, Freelance Lead iOS

November 2024 - Present

- Leading development for iOS companion app for new IoT Oven
- Built Bluetooth GATT server using Python.
- Set up Fastlane for development automation of common tasks (deployment, testflight, screenshots, testing, linting).
- **Technologies Used:** Swift, SwiftUI, Fastlane, Python, mkfifo

OurZora, Freelance Senior Software Engineer

March 2023

- Led refactor to support migration to SwiftUI, reducing technical debt and improving developer velocity.
- **Technologies Used:** Swift, SwiftUI

SunHaus, Consulting CTO/Senior Software Engineer

January 2021 – August 2022

- Established engineering organization by setting up development tooling and repository structures, enabling a measurable development process.
- Transformed the company into a software product organization by introducing product management practices, writing a PM job description, and conducting PM interviews.
- Audited the codebase and built test infrastructure and documentation.
- **Technologies Used:** Swift, GitHub

Riva Health, Consulting Lead Graphics Programmer July 2021 – September 2021, January 2022 – March 2022

- Updated GPU pipeline code to best practices, increasing performance headroom on the iPhone and aiding potential FDA approval.
- Collaborated with design team to build a real-time animation using shaders that responded to blood pressure readings.
- **Technologies Used:** Swift, Xcode debugger, Metal

Progrum, Freelance Senior Software Engineer August 2020, January 2021 – February 2021, September 2023

- Authored an open-source project for monitoring `.plist` configuration changes on macOS, receiving 127 stars on GitHub.
- Created macOS desktop apps in Go using the MacDriver library to demonstrate its capabilities to developers.
- **Technologies Used:** Golang, libobjc, Xcode, Objective-C

Hirsh Group, Freelance Lead Software Engineer January 2021 – May 2021

- Ported a real-time audio analysis tool from C to Swift, ensuring parity and performance benchmarks with automated tests.
- Improved performance of the Swift implementation by 195%.
- **Technologies Used:** C, Swift, `swiftc`, x86 assembly language, Xcode debugger

Grove (Acquired), Senior Software Engineer February 2017 – July 2017

- Architected and developed a financial planning tool that empowered advisors, saving hundreds of developer hours per week.
- Led the conception of a software-definable schema tool, enabling swift iteration among financial, engineering, and product teams.
- Created an email system and financial plan archival system to meet fiduciary requirements.
- Optimized a ReactJS form with thousands of elements by 400%.
- **Technologies Used:** Python, ES6, Celery, ReactJS, Postgres

Pandora, Senior Software Engineer January 2016 – February 2017

- Served as backend engineer on a greenfield search engine used by 74 million users.
- Managed a team of 9 cross-functional iOS and Android engineers during a post-acquisition integration period.
- **Technologies Used:** Clojure, Elasticsearch, Python, Kafka, Swift, iOS, Objective-C

Rdio (Acquired by Pandora), Senior Software Engineer November 2014 – January 2016

- Rebuilt the iOS app in Swift, boosting performance, testability, code quality, and team autonomy.
- Implemented “Rdio Playlists for Marketing,” enabling radio station hosts and other partners to create custom playlists on the platform.
- **Technologies Used:** ReactJS, ES6, Swift, Objective-C

UserVoice, Software Engineer

May 2009 – June 2010

- Created a Rails plugin to dynamically generate plain-text email parts, saving 50 engineering hours per month.
- Improved email delivery rate by setting up DKIM, TLS, Reverse DNS, and bounce-rate monitoring.
- Built an on-the-fly CSS inliner for HTML emails, further boosting developer productivity.
- Created an internal URL link shortener for branded links, improving observability by 10%.
- **Technologies Used:** Ruby on Rails, JavaScript, jQuery, CSS

Publications

- *Video Relighting Using Infrared Illumination*, 2008, *Computer Graphics Forum*, Vol. 27, Issue 2

Education

University of California, Santa Cruz

2008

Bachelor of Computer Science with a minor in Mathematics