

Experienced Software Engineer developing for MacOS & iOS applications. Expertise with debugging, problem solving, and solution design architecture. Punctual communicator, patient, and thrives on a fully remote team. Mentors and assists teammates in their professional growth. Always open to new technologies: mindful of which tool is best suited for a task.

SOFTWARE SKILLS

- **Languages:** Swift, Objective-C, Python, Typescript, C++, C, Ruby, SQL
- **Frameworks:** SwiftUI, UIKit, CoreData, Cocoa, iOS, Vapor, OpenGL, GNUstep, React
- **Tools:** XCode, Jira, Github, Bitbucket, VSCode, Docker, Postgres, SQLite
- **Markup:** Typst, Markdown, LaTeX
- **Shell:** Bash, Zsh, Fish, Git, Make

EXPERIENCE

Software Engineer III

@ Crowdstrike

Sept 2024 - Present

Developed features and tests for the macOS endpoint sensor

Tech: Swift, EndpointSecurity, Python, C++, BitBucket, Jira, Zsh

- Investigated and fixed broken tests for pytest and xctest
- Leading projects to implement new features
- Fixed security issues and potential vulnerabilities

Senior macOS Software Engineer

@ Boombox

Jan 2023 - Aug 2024

Developed and maintained a cloud file syncing application for macOS

Tech: Swift, SwiftUI, FinderSync, UIKit, CoreData, Auth0, Github, Jira, Sentry, Mixpanel

- Took over proof-of-concept project, re-writing majority of product
- Brought first version to market on initial timeline
- Expanded features while improving code quality
- Took lead for project management and release cycle, planning for upcoming initiatives, and managing project backlog
- Designed and implemented a complex file synchronization algorithm
- Worked with backend team to discuss needs of client and improve API efficiency for desktop use cases
- Wrote proposals, technical specs, and results of research
- Developed and expanded backend APIs as needed

Senior Software Engineer

@ Doma (aka States Title)

Sept 2019 - Dec 2022

Full stack web application development for a Title & Escrow platform

Tech: Typescript, React, Postgres, Python, Django, Thrift, Github, Heroku, Azure, Jira, Docker, Kubernetes, CircleCI, GraphQL

- Doma Close for Realtor (Sept 2021 - Dec 2022)
 - Guide technical direction for initial backend of an order status portal
 - Shipped a successful beta release of the order status portal on time, in 1 quarter
 - Architected solutions to work cleanly with legacy systems
 - Worked to improve developer systems and tools, unblocking common issues for teammates
- Athena TPS (Sept 2019 - Sept 2021)
 - Lead development on a document templating service
 - Guide teammates as the team lead for a small team that grew in scope and responsibilities
 - Steer direction and evaluate technology options for greenfield projects
 - Contribute on the cross-team application architecture group, to increase tech cohesion across the organization
 - Help newer employees become familiar with codebase and tech stack
 - Created a tool to help team track work completed for an asynchronous standup

Software Developer & Senior Software Developer

@ Eggplant (aka Testplant)

Aug 2014 - Sept 2019

Developed desktop software for a suite of functional testing products

Tech: Swift, Objective-c, Cocoa, GNUstep, iOS, Python, C++, OpenCV, Docker, Gitlab, Jenkins, Jira, Git, MacOS, Linux, Windows, MinGW

- Lead feature development, working independently when needed on major features
- Developed cross-platform applications using Objective-c (Cocoa) and GNUstep
- Maintained Jenkins build server and build environments for Mac, Windows, Linux
- Identified and fixed complex bugs and issues, including inside GNUstep
- Migrated linux build machines to Docker images, to increase build stability
- Migrated all svn repositories to git. Frequently the team's go-to person for help with git
- Helped identify ideas and ways to improve the applications, both user facing improvements and internal technical improvements
- Part of an agile development team using scrum practices
- Keep up to date with Apple technologies and trends

Software Engineer

@ QiG Group, Greatbatch Medical

Jan 2012 - Aug 2014

Medical device software development, including user interface, rendering engine, algorithms, data acquisition

Tech: C++, Objective-c, Java, Svn, Git, CMake, Gradle, SQLite, Redmine, OpenGL, Matlab, iOS, WinCE

- Architect, design and implement software for a Clinician Programmer Application
- Maintained a Clinician Programmer device emulation environment on iOS
- Design, implement, and optimize a custom 3D rendering pipeline using OpenGL ES 2.0, Textures, shaders, vertex buffers, etc.
- Co-authored 2 Patents (US9943691B2, US9767255B2), and 2 Patent Disclosures
- Mathematically solve and implement algorithms designed for a Clinician Programmer
- Implement laboratory data acquisition virtual instruments with LabView
- Setup and run equipment during pre-clinical animal research labs
- Maintained xServe, Git, Redmine, Hudson and other internal servers for development team
- Assist in drafting and disclosing intellectual property
- Scrum master for software development team in agile

Software Development Intern

@ QiG Group, Greatbatch Medical

Summer: 2011

Worked with other developers to create an OpenGL-based rendering engine

Boy Scout Canoe Trip Guide

@ Northern Tier National High Adventure Base

Summer: 2009, 2010

Lead week-long canoe trips for groups of scouts.

— EDUCATION —

University of Colorado at Boulder

Boulder, CO

Applied Mathematics

Graduated Dec 2011

Minor: Computer Science

GPA: 3.459

— OTHER PROJECTS —

Bag Notation

- Designed a language to represent musical notation for bagpipes
- Created a language parser and compiler in swift, to generate printable music as PDFs

Quiz Tracker

- Developed an iOS app for the App Store, to track your score for a game of Jeopardy
- Built entire interface with SwiftUI

— LEADERSHIP —

Eagle Scout

Boy Scouts of America

- Excellent communication and interpersonal skills
- Ability to perform independently in many situations

Pipe Major

Northern Colorado Caledonia Pipe Band and

Wake and District Public Safety Pipes and Drums

- Lead regular rehearsals for groups of 10-30 musicians
- Set the music to be played in the band, and teach it to members to ensure a cohesive style
- Help others keep their bagpipes in proper working order
- Lead band in parades and competitions

Thanksgiving meal director

First Presbyterian Church

- Organized volunteers and planned meal for 2 years
- Meal served around 350 homeless each year, with over 100 volunteers

— MISC —

- Bagpipe Player
- WWDC Attendee

- Mechanical Keyboard Enthusiast