https://pwxn.dev/resume https://github.com/pwxn

Software Skills

Languages

- Swift, Objective-C, Python, Typescript
- C++, C, Java, LATEX, Markdown
- Bash, Git, Svn, make, CMake, Redmine, Jira, Jenkins, Gitlab, Heroku, CircleCI
- OpenGL, Cocoa, GNUstep, iOS, Docker, Thrift
- Matlab, Vapor, React

Experience

Senior Software Engineer

Sept 2019 - Present

Doma (formerly States Title)

Durham, NC

Full stack web application development for a Title & Escrow platform

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

- Doma Close for Realtor (Sept 2021 Present)
 - Guided technical direction for initial backend of realtor status portal to a successful beta release.
 - Architected solutions to work cleanly with legacy systems
- Athena TPS (Sept 2019 Sept 2021)
 - Lead development on a document templating engine
 - Guide teammates as the team lead for a small team that grew in scope and responsibilities
 - Steer direction and technology choices for the greenfield project
 - As project grew, contribute on the application architecture super-group
 - Help newer employees become familiar with codebase and tech stack

Senior Software Developer

Aug 2014 - Sept 2019

Eggplant (formerly Testplant)

Boulder, CO

Developed desktop software for a suite of functional testing products

Tech used: 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
- Integrated 3rd party open source libraries into application
- Migrated linux build machines to Docker images
- Migrated 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

QiG Group, Greatbatch Medical

Broomfield, CO

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

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

- Architect, design and implement software for a Clinician Programmer Application.
- \bullet Design, implement, and optimize an embedded 3D rendering engine OpenGL ES 2.0

Textures, shaders, vertex buffers, etc.

- Co-authored 2 Patents (US9943691B2, US9767255B2), and 2 Patent Disclosures
- Investigate proofs of concept for new features (software application for Clinician Programmer)
- Interpret functional requirements to implement software application for a Clinician Programmer
- Mathematically solve and implement algorithms designed for a Clinician Programmer
- Implement laboratory data acquisition virtual instruments
- Setup and run equipment and proprietary virtual instruments during pre-clinical animal research labs
- Prepared releases for numbered software versions
- Multiple low-level environments (WinCE and iOS)
- Incorporating 3rd party libraries to be used in an embedded software development
- Maintain 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

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

Boy Scout Canoe Trip Guide

Northern Tier National High Adventure Base

Lead week-long canoe trips for groups of scouts

Education

University of Colorado at Boulder

Applied Mathematics

Minor: Computer Science

Boulder, CO

Graduated Dec 2011

GPA: 3.459

Summer: 2011

Broomfield, CO

Ely, MN

Summer: 2009,2010

Other Projects

Quiz Tracker

- Developed an iOS app for the App Store, to track your score for a game of Jeopardy
- Completely using SwiftUI

nccpipeband.org

- Rewrote website backend using php; including user log in system, user profiles/band roster, user permissions, restricted file access, events calendar
- As webmaster, maintain user lists and site pages
- Re-implemented the website again, using Joomla

Tic Tac Cubed

• Developed an iOS game for the App Store, based on a tic tac toe variant

Leadership

Eagle Scout

Boy Scouts of America

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

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.

- WWDC attendee
- Previously Wilderness First Aid and CPR certified
- Bagpiper
- Keyboard Enthusiast