

Software Skills

Languages

- Swift, Objective-C, Python
- C++, C, Java, L^AT_EX, Markdown
- Bash, Git, Svn, make, CMake, Redmine, Jira, Jenkins, Gitlab
- OpenGL, Cocoa, GNUstep, iOS, Docker
- Matlab, Vapor

Experience

Senior Software Developer

Aug 2014 - Present

Eggplant (formerly Testplant)

Boulder, CO

Desktop software development for a suite of functional testing products

- Lead feature development, working independently when needed on major features
- Developed cross-platform applications using Objective-c (Cocoa) and GNUstep
- Maintained build server and multiple build environments
- Identified and fixed complex bugs and issues
- Fixed issues inside GNUstep
- Integrated 3rd party open source libraries into application
- Migrated build machines to Docker images
- Migrated svn repositories to git. Frequently the goto person for help with git in the group
- 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

Software Engineer

Jan 2012 - Aug 2014

QiG Group, Greatbatch Medical

Broomfield, CO

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

- Architect, design and implement software for a Clinician Programmer Application.
- Design, implement, and optimize an embedded 3D rendering engine
 - OpenGL ES 2.0
 - Textures, shaders, vertex buffers, etc.
- 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 preclinical 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 (agile)

Software Development Intern
QiG Group, Greatbatch Medical

Summer: 2011
Broomfield, CO

- Worked alone and in pair programming to write software
- Worked on the creation of an OpenGL-based rendering engine
- Participated in design meetings and code reviews

Boy Scout Canoe Trip Guide
Northern Tier National High Adventure Base

Summer: 2009,2010
Ely, MN

- Lead week-long canoe trips for groups of scouts
- Was a knowledgeable resource and role model to the crew
- Assisted with other departments and performs other duties when not on the trail

Education

University of Colorado
Applied Mathematics
Minor: Computer Science

Boulder, CO
Graduated Dec 2011
GPA: 3.459

Other Projects

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

Publications

Author on 2 Patents, and 2 Patent Disclosures

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