
Summary

Software engineer with 7 years of experience with a wide variety of languages, frameworks, and development processes. Looking to move into a senior engineering position with a long-term goal of a technical leadership role. Interested in small companies developing unique products or services geared toward education, health, and personal development.

Languages

Java, Ruby, Objective-C, JavaScript, C, Bash, C++.

Frameworks

Android, Rails, iOS, Cocoa, node.js.

Experience

Learnist

February 2013 - present

Android Engineer

Reworked the Learnist Android app for new user experience and business direction. Worked closely with the design team to incorporate Android design principles while maintaining a look and feel similar to the web and iOS clients. Implemented In-app Billing for premium Learnist content. Dove deep into every aspect of the app from animations to the custom SQLite persistence layer. Stayed involved in API development by fixing bugs and leading engineering meetings.

iOS Engineer

Learned Objective-C with a small team and helped build the Learnist iOS app, which was released on a very aggressive timeline (6 months) and featured in the education category multiple times. Created highly customized views both programmatically and in Interface Builder. Worked closely with the product and marketing teams to continually improve user experience and metrics. Integrated with Facebook, Twitter, built-in Email and Contacts apps, Google Analytics and other services. Wrote a build system to distribute nightly iOS builds to the company and beta testers via TestFlight. Organized team meetings to ensure communication during migration to CoreData on iOS and to coordinate API work for both mobile clients.

Full-Stack Engineer

Built Learnist, a social network for learning, from the ground up using Rails, Nokogiri, Redis, Neo4j, AngularJS, jQuery, and CoffeeScript. Delivered large content curation and social interaction feature sets at a rapid pace. Created tailored processors and presentations for embedding content from an increasing number of external sites.

Grockit

July 2011 - February 2013

Full-Stack Engineer

Maintained and extended the Grockit online test prep website, including game servers and a custom content editor. Used Jasmine and RSpec to test-drive UI and backend work, along with WebDriver for integration testing. Developed major pieces of the School Match feature, which uses practice test scores and social network connections to recommend colleges. Used node.js to build new game server backend along with a quest system and more fluid social experience.

Songbird

May 2010 - July 2011

Software Engineer

Implemented features and fixed bugs in Songbird for desktop and Android. Specialized in multi-resolution (phone, tablet, mp3 player) and landscape layout on Android project. Worked with marketing and sales teams to add and tweak analytics. Wrote significant portions of the Play Queue feature for Songbird 1.9 including complex metadata-synchronization code. Focused on UI issues such as drag-and-drop and windowing within the cross-platform Mozilla architecture.

Digidesign (Avid Audio)

July 2007 - May 2010

Systems Software Engineer

Integrated new hardware devices and maintained the audio engine, system interface and drivers in the Pro Tools codebase. Successfully debugged elusive USB driver issues using two-machine kernel debugging and kernel tracing facilities. Implemented a C++ remote procedure call mechanism to communicate with an embedded PCIe-based DSP platform. Re-factored low-level and embedded C and C++ code to improve design and testability of next-gen system. Wrote C++ bindings for systems-level libraries to add component-level tests to new code. Used Ruby to create and extend test scripts, bring up new test infrastructure, and automate component-level tests.

Software Engineering Lead for Test

Responsible for improving automated test tools and increasing unit test coverage at Digidesign. Selected and extended a C++ unit test framework (UnitTest++) based on developer feedback. Used Perl to integrate unit tests into build system and to automate project setup in Visual Studio and Xcode. Supported developers writing unit tests via wiki, e-mail, and pair programming.

Developer Services Engineer

Maintained the Pro Tools plug-in SDK, sample code, and documentation. Supported 3rd party plug-in developers via e-mail with a wide variety of technical issues. Implemented new user interfaces for Eleven Free, Impact, and SansAmp PSA-1 plug-ins in C++. Added drag-and-drop functionality to the plug-in SDK for plug-ins using external GUI frameworks. Trained and supported a team of offshore engineers by writing custom tools and setting up wiki documentation.

Education

University of Rochester, Rochester, NY

September 2003 - May 2007

B.S., Electrical and Computer Engineering

- Concentrations in digital signal processing and computer architecture.
 - Dean's List seven of eight semesters.
 - Graduated Cum Laude with overall GPA of 3.7/4.0.
 - Minor in Mathematics with a GPA of 4.0/4.0.
 - Completed three-course cluster in economics, and four-course cluster in music theory.
 - Member of Tau Beta Pi engineering honors society.
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Projects

- itch-android: CodePath's official example app for Android layout and styling.
 - itch: OS X app for making glitch art from PNG files.
 - analyze: Spectrum analyzer for OS X using CoreAudio and OpenGL.
 - alpacafarm.io: Interactive geometric using an HTML5 canvas.
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Hobbies

Electronic music, digital art, carnivorous plants, camping.