

NICOLAS STEVEN MILLER

<http://nicolasmiller.github.com>
nicolasmiller@gmail.com
+001 612-965-1669

SELECTED SIDE PROJECTS

Kosmische - A virtual analog synthesizer and sequencer for Android devices. (Java, C++)

2601 - An Audio Unit instrument based on the Atari 2600 Tia sound chip. (C++)

Hal, Flour - Scheme interpreters. (Ruby, Javascript respectively)

Gwyon - A browser-based Tetris implementation. (Javascript)

Source available on Github (see url above). Kosmische is available on the Google Play Store.

EXPERIENCE

Consulting iOS Developer Vindow, Minneapolis, MN 4/14 - Present

Currently implementing initial contract prototype of a curated, mobile e-commerce application. Technologies: Objective-C, iOS.

Consulting Backend Developer RainforestQA, San Francisco, CA 12/13 - 2/14

Improved job queuing backend infrastructure robustness. Expanded customer test script flexibility with variable substitution feature. Reduced fraud rate with human-verifying question generators. Technologies: Ruby, Rspec, Rails, PostgreSQL, Coffeescript, Backbone.js, Heroku.

Backend/Android Developer Spotsetter, San Francisco, CA 12/12 - 12/13

Increased hit rate of map data venue resolution algorithm by 30%. Optimized and maintained social and web data crawlers and analysis tools. Wrote initial Android release singlehandedly in 2 week sprint.

Technologies: Python, Java, Javascript, iOS, Android, DynamoDB, MongoDB, RDS, EC2.

Full-stack Web Developer FoundationIP, Minneapolis, MN 9/11 - 12/12

Reduced external data interfacing workflow from hours to seconds. Improved usability with persistent, per-user UI customization. Improved security of password recovery mechanism.

Technologies: Javascript, jQuery, JSP, Java, JUnit, Struts2, Spring, Hibernate, SQL Server.

Software Engineer Boston Scientific, St. Paul, MN 3/09 - 5/11

Improved efficiency of patient data persistence tests with custom Python library.

Internships

- Seagate - 5/07 - 12/07 - Built a graphical CAD tool in Java for hard disk air bearing design.
- Karges-Falconbridge - Summer 2006 - Built an asset management system on a LAMP stack.

TECHNICAL SKILLS

As a developer I strive for depth of knowledge, pragmatism, adaptability and clear communication, not merely experience with or adherence to particular languages or tools. My goal is always to ship functionality that is effective, tested and maintainable, regardless of the underlying technology.

I have shipped code in various languages including: C, C++, Java, Python, Ruby and Javascript. I have worked on projects using various modern web and mobile development technologies: Android, iOS, Rails, Rspec, AWS (EC2, DynamoDB, RDS), Heroku, MVC, ORM, Javascript, jQuery, Backbone.js, Ajax, JSON, CSS.

EDUCATION

Bachelor of Computer Engineering, August 2008, University of Minnesota, Twin Cities

Undergraduate Honors Thesis - *Computer-Aided Color Appearance Design*

Developed OpenGL applications in C++ to locate and visualize trends in automotive paint color space data. Wrote a physically-based renderer to model metallic paint surface reflection.