# **Josh Nichols - Software Engineer**

- o josh@technicalpickles.com
- http://technicalpickles.com
- o Boston, MA

# Goals

- To build products users enjoy using
- To work on a team that its members enjoy working with
- To write code developers enjoy coding
- o To engineer systems system administrators enjoy administrating

# Skills

# Programming Languages

Ruby, Java, JavaScript, Bash.

### View Languages

HTML, XML, CSS, RHTML, HAML, SASS, JSP.

# Testing

RSpec, Cucumber, shoulda, test/unit, factory\_girl, mocha, rr, JUnit, jMock, Selenium.

#### Tools

VIM, Rake, ruby-debug, git, subversion.

## Deployment

nginx, Mongrel, Capistrano, Vlad the Deployer, Apache.

### Web Frameworks

Ruby on Rails, Sinatra, Rack, jQuery, Google Maps API.

### Databases

MySQL, ActiveRecord, SQL.

# Operating Systems

Mac OS X, Gentoo Linux, Windows XP.

# Agile practices

Test Driven Development, Continuous integration, Daily standup meetings, Pair programming, Code reviews.

# **Skill Stories**

- Endlessly researches and evaluating new tools, techniques, processes, etc
- Frequently reads and patches source code of tools and libraries used for day-to-day development.
- Comfortable with going from a freshly installed system, and preparing it to act as a production server
- Create prototypes to experiment or better understand problems, tools, techniques, etc

# **Career History**

# Versus Technology, Fan Vs Fan, Distributed

Fan Vs Fan is a site for sports fans where they can face off with other members using their webcams, as well as write articles and record fancast shows.

## Lead Engineer (Contract), March 2009 through Present

- Was soley responsible for planning, developing, deploying, and maintaining site
- o Worked with client to plan site direction, identify business requirments, and schedule feature implementation
- Worked with EngineYard to monitor fanvsfan.com, and respond to downtime and other production problems
- Monitored site performance (both client and backend), evaluated improvements, implemented them

# SNIF Labs, Boston, MA

SNIF Labs designed and built an intelligent dog tag which lets you monitor your dog's activity while you're away and keep in touch with his friends and yours.

### Software Engineer (Full-time), August 2008 through December 2008

• Evaluated and introduced Ruby and Rails 'best practices' to improve code clarity and maintainability

- Evaluated and introduced agile practices which reduced management overhead and improved developer productivity
- Automated build system by implementing a continuous integration server
- Improved test coverage from 40% to 80%
- Migrated 2 years of subversion data into git on GitHub

#### Boston Ruby Group, Boston, MA

The Boston Ruby Group is composed of some 400 members in the Greater Boston area with the shared interest in the Ruby programming language.

#### Member, Presenter, and Organizer (Volunteer), November 2007 through Present

- Presented Git as a Subversion replacement, Extracting Plugin and Gems from Rails application, RailsRumble 2008 Retrospective, and Rake: The Familiar Stranger
- Schedules local and out-of-town speakers to present at monthly meetings
- Collaborates with publishers and other sponsors to provide giveaways at meetings
- Developed and maintains the group's website for managing events, jobs, and projects

#### Broad Institute, Cambridge, MA

The Broad Institute of MIT and Harvard is a research institute dedicated to the study of genomics for the biomedical sciences.

#### Software Engineer (Full-time), Chemical Biology Department, June 2007 through August 2008

- Designed and implemented a web application for managing chemical biology research on a team of 8 developers
- o Collaborated with chemists and chemical screeners to determine requirements and to improve user experience
- Extended Acegi Security to support internal authentication infrastructure
- o Implemented AJAX to provide a better user experience for long user tasks, reducing user errors
- Evaluated, implemented, and embraced new technologies to improve product quality, developer productivity, and developer sanity
- Presented technical talks to the Broad developer community: Java on Gentoo Linux and You, Me, and Acegi

#### Gentoo Linux

Gentoo Linux is a special flavor of Linux that can be automatically optimized and customized for just about any application or need. Extreme performance, configurability and a top-notch user and developer community are all hallmarks of the Gentoo experience.

#### Public Relations Project (Volunteer), January 2008 through July 2008

- Researched and implemented changes to the project, resulting in improved community relations, openness, and transparency
- Drafted announcements for Gentoo's front page
- Documented best practices for the project, such as for writing accessible announcements

#### Ruby Project (Volunteer), December 2006 through July 2008

- Provided online support for users on the #gentoo-ruby IRC channel
- Triaged and resolved Ruby bugs filed with Gentoo's Bugzilla
- Maintained widely used Ruby packages including: Rails, Capistrano, and RSpec

#### Java Project Lead (Volunteer), January 2006 through June 2007

- Oversaw recruitment and training of potential developers, doubling the team size
- Collaborated with other open source leaders to promote and facility Linux as a Java platform

#### Java Project (Volunteer), Spring 2005 through June 2007

- Drastically improved Gentoo Linux as a Java platform
- Worked online support for users on the #gentoo-java IRC channel and gentoo-java mailing
- Triaged and resolved Java bugs filed with Gentoo's Bugzilla
- o Contributed up bug fixes and enhancements to upstream projects
- Wrote documentation including end-user documentation and developer documentation
- o Maintained many widely used Java packages, including: Eclipse, Groovy, JRuby, Maven, Ant, Spring, Hibernate

# R. R. Donnelly (formerly Banta Internet Solutions), Cambridge, MA

RR Donnelley is the world's premier full-service provider of print and related solutions.

#### Software Engineer (Full-time), August 2005 through June 2007

- o Developed and maintained web-based CMSs and marketing tools
- o Collaborated with the architect and senior engineers for project planning and high level design
- Evaluated, implemented, and embraced new technologies to improve product quality, developer productivity, and developer sanity

# Scientific Computation Research Center, RPI, Troy, NY

The Scientific Computation Research Center is an organization focused on the development of reliable simulation technologies for engineers, scientists, medical professionals, and other practitioners.

# Assistant System Administrator (Intern), Fall 2001 through Spring 2005

- Supported approximately 30 workstations, 20 servers, and 4 clusters.
- Compiled, configured, and installed various open source products for Linux, Solaris and IRIX.
- Worked towards improving the network's infrastructure to facilitate the administration of the network.
- Configured and maintained several network services including: IMAP, SMTP, mailing list, web hosting, network monitoring, centralized logging, and automated installations.

# Education

Rensselaer Polytechnic Institute, Dual B.S. Computer Science and Psychology May 2005