### Ryan T. Hosford

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#### Education

Bachelor of Science in Electrical Engineering (B.S.E.E.), Fall 2004 – Winter 2009

- University of Alabama at Birmingham
- Studied electromagnetics, electrical machinery, analog & digital circuit analysis & design, software, digital signals processing, radio signals
- Senior Project: Built <u>lab equipment</u> to demonstrate Nyquist's sampling theorem to future signals & systems students
- GPA 3.0/4.0

### **Summary of Qualifications**

- Experienced lead developer and team member
- UX Design and Development
- Linux, OS X, Bash, Ruby, Rails, jQuery, HTML, CSS, HAML, ERB, Assembly, C/C++, Java, Matlab
- Testing frameworks: Spinach, Cucumber, MiniTest, RSpec
- Familiar databases: PostgreSQL, MySQL, MongoDB
- Solr, Sunspot, Heroku, Redis, Sidekiq
- VIM
- HIPAA Certified

### **Work Experience**

### Freelance Development (Birmingham, AL)

Software Consultant and Developer, 09/2012 - Present

- Built applications, wrote gems, wrote tests, performed root cause analyses, shipped features
- Wrote Ruby interface for client's API with complete documentation, supporting multiple API versions using composition and inheritance
- Published open source solutions when appropriate

## Isotope 11 (Birmingham, AL)

Ruby, Ruby on Rails developer, 09/2011 – 09/2012

- Developed web applications using Ruby, Rails, jQuery, MySQL, PostgreSQL
- Rapidly developed as an asset to begin consulting on clients' projects (one month)
- Maintained average ~95% external billing rate while reaching more than 300 hours overtime
- Built and tested software for various internal and external projects

The City Grill (Gulf Shores, AL)
Crowder Gulf, Operation Deep Clean (Gulf Shores, AL)
The Original Oyster House (Gulf Shores, AL)

<u>Bartender</u>, 05/2011 – 08/2011 <u>Field Technician (BP Oil spill)</u>, 02/2011 – 04/2011 <u>Bartender</u>, 04/2010 – 08/2010

# **Open Source contributions**

- RubyGems.org profile
- <u>StackOverflow</u> profile
- Github profile
- Engaged in development of Suitcase, an API wrapper for the Expedia Affiliate Network
- Contributed to the Pivotal Labs' License Audit
- Created DependencyTracker, a simple app to help with quickly disclosing all your open source dependencies' licenses to lawyers

### **Software Engineering Projects**

WellPortal, lead developer

Ruby 1.9/2.0, Rails 3.2, 02/2013 - Present

Migrated to Ruby 2.0, latest Rails 3; migrated from MySQL to PostgreSQL

- Introduced features to illuminate patients who may be at risk for acquiring certain medical conditions
- Implemented features to surface patients' statuses relating to healthy and elevated ranges concerning measurements, measurement dates, lab results, gender, and health
- Root cause analysis on long standing and recent issues

### HealthyNV (Medicaid), architect & sole developer

<u>jQuery, Ruby 2.0, Rails 3.2</u>, 11/2012 – Present

- Runs on JRuby or MRI with PostgreSQL
- Provides administrative and organization specific privileges
- Supports management of basic records and facilitates several organizations' research studies
- Randomly assigns newly created patients to one of several experimental groups using eenie meenie
- Creates reward transactions in an external system when users create records
- Provides a filterable CSV export feature

## <u>HealthyNV (Medicare)</u>, architect & sole developer

<u>iQuery, Ruby 2.0, Rails 3.2, 11/2012 - Present</u>

- Runs on JRuby or MRI with PostgreSQL
- Provides administrative and organization specific privileges
- Supports management of records like: demographics, prescriptions, serious conditions, specialist referrals, orders for life sustaining treatment, hospitalizations, transfers, health risk assessments.
- Supports document upload and download, both as record attachments and attached directly to patients.
- Main interface reveals which patients are most at risk and which patients have the most urgent symptoms.
- Provides a filterable CSV export feature (for various tables)

### Mr. Arlo, architect & lead developer

<u>iQuery, Ruby 1.9.2, Rails 3.1, Heroku, Redis, Sidekiq, 04/2012 – 09/2012</u>

- Defined process for updating user information as data is streamed asynchronously from Facebook's OpenGraph API
- Established relational structure for all persisted data models
- Developed a suggestive search feature that improves results for a given user as knowledge is gained via user history or public APIs
- Designed user experience for and implemented an intuitive, unified buy-flow to support the sale of products through several APIs at once
- Interacted with various APIs: Expedia Affiliate Network, OpenTable, Viator, 4 Square, Yelp, Instagram, Teleportd, and others
- Mitigated project delays by retasking resources, performing research, and communicating solutions
- Implemented look-ahead search to ensure a valid destination object is sent to each product search module
- Developed full-text search algorithms for products stored in local database
- Implemented interstitial to allow user interaction while products are fetched
- Contributed to open-source projects in order to support application requirements

### Auto Parts Tomorrow, Ruby, Ruby / Rails developer

iQuery, Ruby 1.8, Rails 2.3, 10/2011 - 04/2012

- Provided geo-location feature, allowing client to offer a more aggressive shipping price earlier in the customer buy-flow with low risk
- Created a new shipping system, minimizing losses by requiring products with high shipping costs be shipped separately from products qualifying for discount programs.
- Improved search accuracy and performance by implementing Sunspot and developing algorithms to meet client's needs

### University of Alabama at Birmingham, B.S.E.E. program

Ruby on Rails, Matlab, 08/2008 – 12/2009

- Using Ruby/Rails, developed mailers for a balloting application an IEEE project
- Wrote Matlab script that analyzes an audio clip, identifies corruption in the frequency domain, and applies a notch filter at the correct frequency and bandwidth to restore the signal
- Wrote Matlab script to sample an image and determine whether the image contains some predefined pattern