Kurt R. Rudolph

1753 W Augusta Blvd, Chicago, IL 60622 ● krudolph9@gmail.com ● (708) 620-7839

EDUCATION

University of Illinois   Urbana-Champaign, IL
Bachelor of Science in Computer Science   *August 2012*
Focus: Database Systems & Mathematics   *GPA: 2.56/4.00*

WORK EXPERIENCE

Eris Exchange
Software Engineer   November 2013 - Present
- Support financial exchange build on a RabbitMQ core (an Erlang library) and Ruby on Rails back end built on JRuby.
- Coordinate with control center to improve product usability and reliability.
- Rearchitected system to support trade void functionality.
- Made performance improvements to adapter connecting to business partner.
- Rebuilt several components using "Eris Application" framework.
- Built out generalized clone feature and applied to clearing firms and users accounts.
- Identified and fixed security vulnerabilities.
- Built out more granular user permissions to product types.
- Many bug fixes: first fixing rate calculation, UI tweaks, holiday run issues.

Rudy Computing *Software Engineer & Founder*   August 2012 - November 2013
- Contracted as full stack developer for implementation of LAMP based web app SafelyFiled.com for the duration of four months.
- Implemented Java based mail monitoring/alert software for Bold Web Services.
- Wrote shopsense-ruby gem.
- Built single page administration panel using backone.js.
- Building off the Linux based RaspberryPi board and working closely with data acquisition hardware designers, developed software to aggregate and analyse the data of the sensory devices for combustion emissions testing devices. Contracted by the University of Illinois, Department of Environmental Engineering.
- Wrote microAeth-AE51-ruby gem.
- Built Amazon Marketplace Web Service reporting application building off Rails.

PROJECT EXPERIENCE

- CudaMP - A Message Passing Interface (MPI)-like protocol for Graphics Processing Units (GPUs) developed by my senior project team. The video is the application of the project performing the rasterization of the 3d-view OpenKinect project yielding slightly faster results than OpenGL.

- Alternative High Performance Benchmarks - A project featured in the PGAS section of 2011 Supper Computing conference. The project explores PGAS languages for alternative HPC benchmarks, specifically a UPC implementation of the Graph 500.

COMPUTER SKILLS

Programming Languages:	Proficient: Ruby, Javascript, C; familiar: C++, MIPS, Erlang, Python, Coffeescript.
Markup Languages:	HTML, LaTeX, Markdown, Haml, YAML, JSON.
Web Frameworks & Common WebAPIs:	Ruby on Rails, Knockout.js, Sinatra, Apache, jQuery, REST, Ajax, Backbone.js, Twitter-Bootstrap.
Other Tools & Notable Proficiencies:	MongoDB, Git, Vim, CUDA, OpenGL, Subversion, Unix-Screen, SSH, able to administrate most Unix & Linux distributions, navigate Mac OS *entirely* via keyboard, SQL (MySQL & PostgreSQL).

EXTRA-CURRICULAR ACTIVITIES

- Attend Chicago Open Gov Hack Night, C/C++ Users Group,
- Completion of VSCSE Proven Algorithmic Techniques for Many-core Processors.
- Active participant of StackOverflow.
- Awarded 1st prize at the 2013 LincolnLabs Chicago Hackathon for Chi-Text.
- Personal website, KurtRudolph.net (please see site more extra-curricular activities).