

Jonathan Rosenberg

Education

The University of Texas at Austin

Bachelor of Science in Computer Science - May 2010

Experience

Software Developer J.J. Pickle Research Campus - Institute for Geophysics

July-Aug 2009

- Reduced Latency by optimizing website queries to database, upgraded user interface and tools for researchers and specialists to retrieve seismic data from the Institute of Geophysics
 - PHP, MySQL, Ajax, and Adobe CS3

UI and Content Organizer Department for Family Protective Services

Jan-May 2009

- Designed electronic training website to help faculty register and manage classes on line
 - PHP, MySQL, Adobe CS4

Proctor for Introduction to Computing Course The University of Texas at Austin

Sept-July 2009

- Developed a program to automate grading for a variety of inconsistent projects
 - Developed in Bash Shell, Java, Python, Perl, Windows 7 and Eclipse IDE

Software Developer E2open

Jan-Aug 2007

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- Developed an automated solution to replace a manual email process for addressing users needs. This solution reduced hours and increased customer satisfaction
- Developed an automated solution to get 3rd party licenses to legal
- These solutions required integration of multiple databases as well as using wide variety of technology including (but not limited to) web design, scripting, struts, mySQL, email technology, etc
 - Integration of multiple software applications under a single JBoss server
 - Configuration of SQL permissions and developed SQL software to meet company standards
 - Coding in java and scripting languages to search company server and parse 3rd party licensing - data into xml format

Personal Projects

Facilitator and Cofounder Austin Investment Specialists

Dec 2008 - Present

- Group of investors that educate members on how to invest by learning through first-hand experience
- Implemented an automated trading strategy in 10 days for the Interactive Brokers (IB) Collegiate Trading Olympiad
 - Used Java to reverse engineer IB's open source API to conduct online trades

Cofounder Turn2Live

Mar-Dec 2008

- Selected among 40 business and Technical entrepreneurs to create startup in a weekend
- Helped organize/coordinate team
- Company received 15k in prize money for T2L by becoming an Idea to Product (I2P) competition finalist
 - Used PHP, Ajax, PEAR, Firefox, and CSS

Webmaster-Graphic Designer The Great American Film Project (TGAFP)

May 2005 - Dec 2006

- Turned TGAFP static home page it into a dynamic page utilizing flash technology that better represented what a user would expect from a web-site dedicated to film

Cofounder-Coordinator-Webmaster Elevator Art Club (EAC)

Jan 2003 - Sept 2005

- Developed a group to gain recognition for artists in the UT community. I achieved this by directing and coordinating a 5 member group of artists in designing portable artworks for downtown that was awarded "*Best of Austin Art Collective*" by "*The Austin Chronicle*"
 - Implemented a dynamic and artistic website through Flash and ActionScript Technology

Academic Projects

- Created computer vision solutions to track moving objects in video, object detection using a voting-based Generalized Hough, an image stitcher that automatically creates an image mosaic, and seam carving for content-aware image resizing
- Multi-threaded and parallel "Map/Reduce" paradigm used in large cluster-scale search engines
- Implemented GPU Quick Sort algorithm in CUDA
- RSA encryption and decrypt (java)
- Data File Lempel-Ziv compression and decompression (java)
- Exploiting then Preventing Stack Buffer overflow in LC-3 recursive functions

Courses

Computer Science

Software Engineering ■ Data Management ■ Computer Vision
Intro to Operating Systems ■ Programming for Performance ■ PC Assembly Programming
Automated Reasoning ■ Automata Theory ■ Debugging & Verifying Programs

Math and Finance

Intro to Stochastic Processes ■ Matrices and Matrix Calculations
Accounting ■ Micro & Macro Economics ■ Business Calculus

Natural Sciences

Physics and Chemistry [1 & 2]

Skills

Languages: Java, C++/C, ActionScript 3.0, Python, Ruby, JSP, PHP, JavaScript, Ajax, MySQL, PostgreSQL, Bash, JUnit, CSS, XML, XSL, HTML1.0, MIPS

IDE: Eclipse, NetBeans, Microsoft Visual C++, iMacro

Source Code Management: SVN, ClearCase

Frameworks: Interactive Brokers API, Drupal, Joomla

Applications: Adobe Macromedia CS4 (Dw, Fl, Ai, Ps, etc.), Final Cut Pro, MS Office (Word, Excel, etc..), OpenOffice, Media Editing Applications

Open Source Projects: JavaBB, JSPWiki, BlueprintCSS

Operating Systems: Windows, Mac OS, Linux (Ubuntu, command line, cygwin, KDE)

Multi-lingual: English, German