

# Jonathan Rosenberg

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## Education

### The University of Texas at Austin

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Bachelor of Science in Computer Science - May 2010

## Experience

J.J. Pickle Research Campus - Institute for Geophysics

### Software Developer for the Marine Seismic Data Center

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- 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
  - Worked in XHTML, PHP, MySQL, Ajax, and Adobe CS3

Department for Family Protective Services

### Usability Design and Content Organizer for Electronic Training Site

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- Designed electronic training website to help faculty register and manage classes on line
  - Developed in PHP, MySQL, Adobe CS4, Windows XP and MS Office

The University of Texas at Austin

### Proctor for Introduction to Computing Course

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

E2open

### Software Developer

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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
- 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

## Personal Projects

General web-projects

### Focused on XHTML and W3C standards and Usability Design

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- Created a php module for Drupal
- Implemented jQuery plugins
- Created custom design in WordPress
- Created custom email html designs

Dec 2008 - 2009

Austin Investment Specialists

### Facilitator and Cofounder

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- 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

Turn2Live

### Cofounder

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- 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

Mar-Dec 2008

## The Great American Film Project (TGAFP)

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May 2005 - Dec 2006

### **Webmaster-Graphic Designer**

- 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

## Elevator Art Club (EAC)

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Jan 2003 - Sept 2005

### **Cofounder-Coordinator-Webmaster**

- 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

## **Skills**

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

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

**Source Code Management:** SVN, ClearCase

**Frameworks:** Interactive Brokers API, Drupal, Joomla

**Applications:** Abode 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