# Szu Han Chang

szuhanchang@gmail.com www.szuhanchang.com

15000021262

80 Dapu Road, #3, 27E 8601 Staghouse Mill Ct Shanghai, China Jacksonville, FL 32244 617.505.4312

# Relevant Industry Experience

#### Web Developer @ TheNetCircle, April 2011 – Current: www.thenetcircle.com

- Developed functionality for social network webapp on Nginx with PHP-FPM.
- Created and championed automated test suite development using Selenium 2.
- Performance audited signup process for site and removed 10650ms (35%) on average off of the load time for registrations, increasing customer retention.
- Optimized Lucene/Solr instances to use 40% less memory.
- Served as interim ScrumMaster.

#### CTO @ ModelMaker, September 2010 – April 2011: modelmaker.pillarofeden.com

- Architected the entire application business logic and database schema.
- Designed and implemented a user-friendly backend for administrative control, including integration with TinyMCE for non-technical personnel to edit content.
- Added image upload and server-side image manipulation functionality via GD.
- Improved site usability with the judicious use of JQuery.
- Integrated user authentication and authorization functionality.
- Integrated full internationalization and localization capabilities.

## <u>Software Engineer</u> @ Lime Brokerage, Feb 2009 – May 2010: limebrokerage.com

- Designed and implemented PULP, a custom programming language used to request real time risk metrics for stock and option market performance used in automated trading algorithms. The risk metric calculations were done using C++ and PULP language parsing and interpretation was implemented using ANTLR.
- Wrote jUnit tests for PULP metrics to ensure correctness of code.
- Worked with J2EE using a custom MVC architecture through JBoss, Hibernate for data store, and Adobe Flex for front end visualization to create portlets for clients to access various account, market, and risk data.

## Founder @ Programming Interview, Jan 2009: programminginterview.com

- Customized and administered Drupal to display questions and solutions.
- Tracked and analyzed visitor data using Google Analytics, Piwik, and SEScout to help identify high volume keywords plus drive and monetize website traffic.

### Founder @ Snowboards for Women, Winter 2008: snowboardsforwomen.com I created a website that makes it easy to find a woman's snowboard with price comparisons and reviews. All traffic is organic through SEO.

- Developed parser to extract snowboard price and information from data feeds.
- Wrote shell scripts and cronjobs to automatically periodically run the parsers.
- Researched high volume, low competition keywords for driving relevant traffic.
- Performed SEO to obtain high rankings on keywords.
- Optimized conversions by performing A/B split tests on various UI controls.

<u>Technical Consultant / Freelance Web Developer</u> @ Initiatives for China, *Fall 2008 Initiatives for China* is an organization dedicated to the peaceful transition to a democratic China. As such, most of their communications are sensitive to prevent suppression, modification, or retaliation from the current Chinese government.

- Created a WordPress based site (<u>old.initiativesforchina.org</u>) that provided a
  much more professional web presence as well as easier and faster content
  management by a variety of non-technical personnel. IFC has unfortunately
  decided to abandon WordPress and revert back to an HTML/CSS site.
- Designed, set up, and administered a secure Linux mail server from scratch using Dovecot, Exim, and SquirrelMail via HTTPS for the organization to send and receive emails and attachments without the possibility of third-party eavesdropping or content manipulation that remains in production use today.

#### <u>Cofounder</u> @ Fuel for Hire, <u>Summer 2007 – 2008</u>: <u>www.fuelforhire.com</u>

- Collaborated to design and implement architectural and feature requirements.
- Worked remotely via Skype and IM with cofounders on product development.
- Set up and administered the staging and production servers (Ubuntu, Apache, MySQL, PHP) as well as the SVN repository.

## **Open Source Contributions**

#### Mozilla, Summer 2011: mozilla.org

• Helped fix a Javascript garbage collection bug in Firefox. <a href="https://bugzilla.mozilla.org/show\_bug.cgi?id=640629">https://bugzilla.mozilla.org/show\_bug.cgi?id=640629</a>

#### Horde, Summer 2005: wiki.horde.org/Project/Sedule

Accepted into the Google Summer of Code and started the Sedule project, a
Horde Framework module to help managers create and edit schedules for
employee shifts based on their availability.

http://permalink.gmane.org/gmane.comp.horde.cvs/34788

## Academic Record

## BA/MA in Computer Science @ Boston University, May 2008

GPA: **3.59** in computer science, **3.51** overall - Cum Laude

- Earned both the Bachelor and Master of Arts degrees in Computer Science in four years through the Boston University BA/MA program.
- Selected by faculty and served as the BUCS 2008 student graduation speaker.



Dual United States and Republic of China (Taiwan) citizen. Native English speaker, fluent in Mandarin Chinese.