

**JOSEPH FRAMBACH**  
*411 Noble St. Pittsburgh PA 15232*  
*(412) 865-7790, joe@framba.ch*

## PROFICIENCIES

### Back-End Development

There is no silver bullet. Right now I can hit the ground running with:

- › PHP: Transitioning 5.2 to 5.3 and 5.4. Familiar with Composer, PHPUnit, and Selenium.
- › MySQL and its ilk: Postgres and Oracle PL/SQL. And its antitheses: MongoDB and Redis.
- › Python and its computation modules: numpy, scipy, QSTK for computational investing.
- › Some frameworks: Wordpress, Drupal, Rails, although I don't like to rely on them.
- › Node and its common modules: async, socket.io, Express, Mongoose.
- › Other servers and proxies: nginx and HAProxy. For load balancing and checkout queueing.

### Front-End Development

Lists are for machines. Throw any technology at me and I'll do just fine.

- › Foundations: HTML, CSS, javascript. I pay attention to standards and new toys.
- › Abstractions: JQuery, HAML, SASS, coffeescript. Writing low level code is so 2000s.
- › Applications: AJAX, Twitter Bootstrap, JQuery Templates, Handlebars, Mustache.

### Operating Systems and Software

- › Most comfortable with a bash prompt on Debian.
- › Prefer vim over emacs and git over hg.

## EXPERIENCE

### ShowClix, LLC., Pittsburgh, PA

June 2010 to Present

Senior Software Engineer

Lead architect and developer for core administrative features for event organizers, and front-end checkout process for customers. Assist in hosting local tech meetups for node.js and the ShowClix social recruiting event, Engibeering.

- › Incentix: Use Facebook and Twitter API to give discounts with social promotion.
- › Embed and Facebook checkout: Embeds the purchase process into a website or Facebook page tab.
- › Merchandising: Product selling and fulfillment platform used by C2E2, Blue October, and others.
- › Product bundles: Groups tickets and products, with flexible pricing and reporting options.
- › Membership: Offers members-only tickets and discounts with client's external API.
- › Self-serve membership: Sellers may import membership lists into ShowClix-hosted MongoDB.
- › Questions: Sellers may ask questions to customers per-sale, per-event, and per-ticket.
- › Order fulfillment: Queues shippable orders, verifies tickets, and tracks shipping to customers.
- › BOCA thermal printing: Prints physical tickets using a BOCA printer, with collation options.
- › Email Outbox: Sellers may draft and send emails to customers using TinyMCE editor.
- › Stress testing: Uses Grinder and Linode API to replicate production and slam it with 50,000 users.

### United States Steel Corporation, Pittsburgh, PA

May 2006 to June 2010

Business Services Specialist I - Warehouse, Shipping, and Logistics

- › Converted mainframe COBOL/AS400 programs into VB.NET web interfaces. These include inventory management, truck tracking and gate security applications, and scheduling reports.
- › Supported older ASP and J2EE applications for multiple teams.

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## EDUCATION

### **M.S. University of Pittsburgh**

In progress

Computer Science

- › Human-Computer Interfaces
  - Designed and built Arduino theremin using light sensor.
- › Data Visualization and Modeling
  - Used Ruby on Rails and flot to show inter-hospital MRSA levels.

### **B.S. University of Pittsburgh**

Cum Laude, April 2008

Applied Mathematics and Computer Science with Honors

- › Shape Recognition and Classification Using Fourier Descriptors
  - Shows methods for shape recognition and classification, for searching a database of shapes.
  - Explores properties of shape analysis to develop Shape Signatures and Fourier Descriptors.
- › Question-Answering System using NLP for Google-hosted Competition
  - Python question-answering system analyzes text sources, generates and answers questions.
  - Pitt's three-member team entered CMU's competition, hosted by Google.
- › Lifespan Persistence through Numerical Analysis of Nonlinear Systems
  - Explains iterative methods for finding approximate solutions of systems of nonlinear equations.
  - Second place in Pitt CS Day poster competition.

## INTERESTS

### **Professional Development and Personal Accomplishments**

I am motivated by travel and adventuring. I enjoy couchsurfing and cycling in new cities, meeting interesting people, and thinking differently.

- › Stripe Capture the Flag v2.0. Aug 2012
  - Web challenges: SQL injection, CSRF vulnerabilities, SHA1 padding
- › Backpacked the Appalachian Trail from Georgia to Maine. Summer 2008
- › Ran marathons in Chicago, Pikes Peak, Virginia Beach, Philadelphia, and Pittsburgh.
- › Bicycled from Pittsburgh to Washington, DC, and Pittsburgh to Lake Erie.
- › Competed and currently judge 24-hour Game Coding Competitions. 2007-2012
  - First place in inaugural competition, PyGame defense game.
- › TIME Magazine: Person of the Year 2006
  - *"We're looking at an explosion of productivity and innovation, and it's just getting started."*
- › Boy Scouts of America: Eagle Scout Rank January 2004
  - Designed and built a 30-foot timber bridge which withstood Hurricane Ivan.