# Michal Garbacz

Software Craftsman

# **EXPERIENCE**

## Systems Analyst, State Farm Insurance

Bloomington, IL — Jan 2013 - Current

Operating as a surgical strike force of R&D in our innovation area.

#### **Projects**

- Business Social → Developed backend data model and UX improvements for internal social tools. (Backbone.js, REST API, Open Graph)
- Data Visualization → Developed a web application that feeds and consumes Hadoop stored data to produce manipulable visual interpretations. (Java, Hadoop, D3.js)
- Mobile First Design → Developed a scorecard web application to score websites on their adherence to the mobile first design philosophy. (Node.js, Phantom.js, Angular.js, Web Sockets)

# Software Engineering Intern, State Farm Research and Development Center

Champaign, IL — Feb 2009 - Dec 2012

Designed and developed a wide variety of working prototype software. Part time during the Spring/Fall semesters, and full time during the summer.

#### **Projects**

- Parallel Programming → Designed and implemented a concurrent, distributed client-server system. Successfully simulated tens of thousands of clients using the system on cheap hardware. (Erlang, Mnesia)
- Android Application Development → Designed and built a context-sensitive application that uses time and location to trigger text, email, or Facebook notifications to user's contacts. (Android)
- Backend Web Development → Developed a web application with a content management system and mobile/desktop views. Worked in tight feedback cycles. (<u>rdc.statefarm.com</u>) (Ruby on Rails, SQLite, MongoDB, HTML/CSS/JS)
- Frontend Web Development → Developed a responsive web application powered by a RESTful API that allows users to track project progress with team members in real-time. (HTML5/CSS3, Backbone.is, Node.is, Web Sockets)

#### Freelance Work

I work on a variety of projects on my own time. I open source them on Github (github.com/mgarbacz)

#### **Highlights**

- Adventure Tone → Developing a collaborative, grid-based music generation web application (<u>source code</u>)(<u>demo</u>)
- Treats for Beats → Developing a web plugin to draw audio visualizations in the browser (<u>source code</u>)(<u>demo</u>)
- Active member of the Stack Overflow developer community. (user:937718)

#### EDUCATION

# University of Illinois at Urbana-Champaign, College of Engineering, Computer Science

Champaign, IL—2008 to 2012

### SKILLS

- Sound Knowledge → JavaScript (client-side and Node.js), Ruby on Rails, HTML5/CSS3, Java
- Experience With → Python, Erlang, Scala, PHP, C#, F#, C++