# SETH MICHAEL HOLLOWAY, PHD

### PERSONAL STATEMENT

Experienced and business-savvy software engineer passionate about creating great products and leading teams.

#### SKILLS

Programming: Python, Django, Java, HTML, CSS, JavaScript, Ruby on Rails, Shell, SQL, NoSQLTechnologies and Methodologies: Google App Engine, Heroku, jQuery, Git, TDD, JUnit, agile, lean

### CAREER HISTORY

# Principal Software Engineer, Evangelist, Toopher Senior Software Engineer, Evangelist, Toopher

October 2014 - Present May 2013 - October 2014

- Developed and maintained software for Toopher's location-based two-factor authentication, including language libraries (Python, Ruby, PHP, Perl, Java, .NET), mobile apps (Android, iOS), and the backend API (Python, Django, Google App Engine)
- Spread the word about Toopher through presentations and training sessions, white papers, blog posts, comments, and face-to-face client interactions
- Implemented self-service billing system using Stripe allowing the company to make money with little to no manual effort
- Owned developer experience (DX), including https://dev.toopher.com/ and our language libraries
- Mentored and guided multiple interns and peers
- Sped tests up by 300% ensuring they continued to be run and provide value

## Senior Software Engineer, Team Lead, Blackbaud

October 2011 - May 2013

- Developed and maintained SaaS CRM software: Convio Luminate CRM, Online, and Analytics
- Contributed to frontend (Visualforce, HTML, CSS, JavaScript, responsive design), backend (Java, JEE/J2EE, Salesforce, Apex, SOQL, SQL), and quality assurance (Ruby, RSpec, and Watir)
- Led a team on client-facing project, delighting the customer and securing additional contracts
- Organized a weekly lecture series to quickly educate people on software development topics, including HTML, CSS, JavaScript, and clean code
- Created an engineering status board that displays the current build condition and progress

### Co-founder, CTO, Vaczoway Solutions Incorporated

May 2011 - Present

- Created web and mobile applications using a range of technologies, frameworks, and platforms including Ruby on Rails, Facebook, iOS, Java, HTML/CSS, JavaScript, PHP, Python, MySQL, SQLite, PostgreSQL, MongoDB, node.js, Google App Engine, Heroku, Amazon EC2/AWS
- Improved search engine ranking (SEO) of web properties to increase traffic using machine learning
- Performed customer interviews, market research, product management and project management duties
- See http://www.oilfieldintelligence.com/, http://www.swiftgive.com/

# Software Engineer, IBM (Lotus)

August 2006 - June 2011

- Architected, developed and maintained an automated BVT system using STAF/STAX, Python, bash, and Rational Functional Tester (RFT), saving over 80 person-hours per week.
- Developed an automated test results summary web app that provided an instant summary in a central location, reducing data collection time, eliminating human errors, and improving team communication.
- Optimized and componentized the build, significantly increasing builds speed (from eight hours to four hours per build), consumability, and maintainability.

Extreme Blue (Technical Intern), IBM

May 2006 - August 2006

- Participated in an agile four-person biz/tech team to create an innovative online consultant scheduling system using Java and Ajax. I applied object-oriented design techniques to create a robust backend and beautiful frontend.
- Performed market research to determine strengths and weaknesses of related products and identify remaining technical problems and approaches
- $\bullet$  Presented project to over 250 people including senior IBM executives

# Research Assistant, Teaching Assistant, Mobile & Pervasive Computing Group January 2006 - May 2011

- Researched and developed a usable smart home using Java and Ruby on Rails. I created an end-user
  programming framework that allowed people of all backgrounds to encode rules. The backend was
  built on a cutting-edge API architecture.
- On top of research, I was a teaching assistant for Project Management. In addition to my official jobs, I mentored numerous students and managed several projects, and created several websites.

# Software Engineer (Intern), IBM (Tivoli)

June 2005 - May 2006

- Architected and created a silent cross-platform installer for rapid, error-free deployments
- Provided DevOps support allowing developers to focus solely on development

# Process Engineer, Product Engineer, Campus Liaison, Texas Instruments August 2003 - May 2005

- As an evangelist for Texas Instruments, I scheduled and presented at recruiting events. My efforts increased TI's visibility on campus and led to hundreds of new applicants.
- Developed new statistical algorithms to determine chip quality, improving yield and increasing profits
- Collaborated on extensive web app using LAMP stack that automated data analysis methods and common engineering tasks, saving valuable time and increasing the amount of good product
- Trained engineers on sameness data analysis method improving co-workers' competencies
- Qualified furnace processes, providing 10% additional diffusion manufacturing capacity

#### **EDUCATION**

#### Ph.D. Software Engineering — Adviser: Dr. Christine Julien

May 2011

The University of Texas at Austin, Austin, TX

Dissertation: "Simplifying the Programming of Intelligent Environments" (usability in smart homes)

# M.S.E. Software Engineering

May 2007

The University of Texas at Austin, Austin, TX

Thesis: "Developing Collaborative Applications Using Sliverware"

#### B.S. Electrical & Computer Engineering

August 2005

The University of Texas at Austin, Austin, TX

# LEADERSHIP ACTIVITIES

Creator, Lecturer, Summer of Learning and Teaching, Blackbaud

Organizer, Talk Tuesdays, Blackbaud

Co-founder, President, Students in Software Engineering (SSE), The University of Texas at Austin

Mentor, Undergraduate and graduate student mentor, The University of Texas at Austin

Co-founder, Austin Software Mentorship (ASM)

Campus Liaison, Texas Instruments' liaison to The University of Texas at Austin

President, Texas Instruments Co-op Social Committee

### Awards and Honors

Golden Globe for Responsive Redesign of TeamRaiser Donation Forms, Blackbaud

Thrust Fellow, The University of Texas at Austin

U.S. Patent #8155948, "Method and system to determine user skill using natural language input"

MCD Fellow, The University of Texas at Austin

College Scholar, The University of Texas at Austin

Runner-up, Moore Elementary Recycling Slogan Contest