

## **Barry Shapira** software engineer

<https://github.com/originalgremlin/portfolio>

[barry.shapira@gmail.com](mailto:barry.shapira@gmail.com)

### **Experience**

**Redbooth** [<http://www.redbooth.com>]

**Principle Software Engineer, March 2015 to February 2018**

- Developed a front-end chat application that used a single codebase to provide native apps for desktop and mobile using Electron, React, and React Native.
- Designed and built a fault-tolerant, scalable, distributed docker swarm on AWS.
- Created a real-time voice-to-text and translation app using a custom-built stream processing framework in Go and commercial AI offerings from AWS, GCS, and IBM Bluemix.

**StoryCloud** [<http://www.storycloud.co>]

**Vice President of Engineering, December 2013 to December 2014**

- Designed and built the foundation of a highly distributed backend-as-a-service platform using Hadoop, HBase, Kafka, elasticsearch, and Java Jersey.
- Assembled an engineering team of a dozen fantastic individuals, including a UX designer, a sysadmin, a data scientist, several backend experts, and several mobile developers.

**EGG-energy** [<http://www.egg-energy.com>]

**Director of Information Systems, August 2012 to August 2013**

- Created an internal business management website for an off-grid energy startup in Tanzania.
- Managed robust data synchronization at remote stations where power and Internet connectivity failures were common.
- Programmed Android phones and tablets using Apache Cordova.
- Coded all aspects of the site using NodeJS, CouchDB, elasticsearch, and Backbone.

**Go Go Gremlin**

**Lead Engineer, September 2011 to April 2012**

- Designed and developed a daily deal search and alert system using MVC design, RESTful APIs, and advanced JavaScript interactions.
- Architected an extensible platform for growth with a high level of abstraction.
- Coded all aspects of the site using Python/Django, JavaScript/YUI, and HTML5.

**Analog Analytics**

**Engineer, February 2011 to September 2011**

- Developed a model to estimate performance for a syndication network of advertisers.
- Unified all web analytics code under Google Analytics.
- Wrote a server to generate custom reports in xml, json, and delimited formats.

**Independent Programming and Study**

**June 2009 to February 2011**

- Wrote an object-oriented, Ajax-friendly JavaScript widget library based on Prototype and Scriptaculous to enable rapid creation of highly interactive web applications.  
[<http://sourceforge.net/projects/scriptwidgets/>]
- Developed agent-based models in Java using the Mason library to explore the effects of network topology on trading and scheduling of trains in the Paris Metro.
- Studied economics at UCSD, attending classes on AI, game theory, econometrics (statistics), microeconomics, and computational macroeconomics, which focused on methods for interpolation, optimization, matrix manipulation, and other important numerical tasks.

## **United States Peace Corps**

### **Education Volunteer in Cameroon, June 2007 to June 2009**

- Taught English and Computer Literacy to francophone high school students.
- Managed the school computer center of 40 desktop computers and 3 servers.
- Wrote a grade and discipline management program in Java.

## **Snap**

### **Developer, December 2004 to June 2006**

- Mined data sets of 100 billion records to improve the search results ranking algorithm.
- Wrote the Ajax library powering the Snap.com search interface.
- Dealt with cross-browser issues, memory management, and object-oriented JavaScript.

## **Global Human Fulfillment**

### **Developer, August 2001 to September 2002**

- Designed a media search engine of over 2,000,000 images and 100,000 movies.
- Developed a multi-threaded, distributed Python robot to crawl the web.
- Generated dynamic HTML pages using PHP and MySQL.

## **Education**

California Institute of Technology

Bachelor of Science in Organic Chemistry, June 1998

## **Programming Skills**

- Languages: PHP, Python, Perl, Java, bash, SQL, HTML, CSS, JavaScript, NodeJS, Go
- Machine Learning: scikit-learn, numpy, pandas, pytorch
- JavaScript Libraries: Prototype, YUI, Backbone/Marionette, jQuery, Underscore, React
- Devops: AWS, Terraform, Packer, Docker
- Databases: MySQL, CouchDB, HBase
- Other: Hadoop, Kafka, Redis, elasticsearch, Solr, Git

## **Social Links**

- Github [<https://github.com/originalgremlin>]
- Bitbucket [<https://bitbucket.org/originalgremlin>]
- LinkedIn [<https://www.linkedin.com/in/originalgremlin>]

## **Patents**

- Modulators of Protein Tyrosine Phosphatases (PTPases)  
[United States Patent Numbers 6,410,556; 6,613,903; and 7,019,026]
- Method of inhibiting protein tyrosine phosphatase 1B and/or T-cell protein tyrosine phosphatase 4 and/or other PTPases with an Asp residue at position 48  
[United States Patent Number 7,115,624]
- Method and apparatus for network controlled access to physical spaces  
[United States Patent Number 9,508,207]
- Automatic generation and registration of alter-ego web service accounts  
[United States Patent Number 9,634,997]

## **Foreign Languages**

- Native English speaker
- Fluent in written and spoken French
- Intermediate in written and spoken Spanish
- Basic knowledge of spoken Swahili