

# Shahar Zimmerman

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[github.com/szimmer1](https://github.com/szimmer1)



[shaharz.me](http://shaharz.me)

## Software Engineer

### Objective

To join an aggressive and technology-driven engineering team which will leverage my programming skillset in data and systems engineering. I seek to grow my knowledge, contribute to a fast moving team, and have long term path within the organization.

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### Work Experience

#### Catalina Labs, software engineer      November 2015 – Present

Catalina Labs develops applications to optimize Internet experience at home, small office and enterprise. The company developed novel technology to optimize WiFi and networking performance, and a user experience that simplifies the highly technical aspects of network optimization for non-technical users.

- Designed and implemented a custom rule engine framework in Ruby. The backend framework is currently used to surface personalized recommendations for the flagship customer-facing product. Implemented recommendations on this framework via a knowledge engineering process of working closely with WiFi and cable/DSL broadband domain experts, and applying data-driven statistical approaches.
- Independently designed and implemented a Ruby web scraping engine to extract unstructured web data to structured JSON documents.
- Designed and independently created POC for a remote (cloud-based) Javascript execution framework, in Node.js which communicate with WiFi routers and other networking devices. The architecture was adopted and currently being used in the flagship product.
- Designed and helped implement a synchronization framework for Rails backend worker processes, in Ruby. The framework is currently being used in all production servers.
- Worked closely with a data scientist to implement an ETL pipeline for readily accessible data. Implemented distributed machine learning training algorithms, and an API endpoint to trained models on the Turi platform (acquired by Apple in August 2016).

#### Solazyme, bioinformatics software engineer      July 2015 – November 2015

- Initiated the switch from pure PHP views to SPA (single-page application) in Angular.js
- Designed and implementing a front-end asset versioning, testing, and build pipeline using Node.js

#### uSPORT, full-stack developer [part time during school]      January 2015 – June 2015

- Laid foundation for social application built on the Meteor framework. Built content embedding.
- Experience gained in Node.js, MongoDB, and PaaS providers



**PayStand, engineering intern [part time during school]    December 2014 – April 2015**

- Built front-end payment customizations for several tenants. Improved API functionality.
  - Gained experience in LAMP stack, virtualization, and relational databases
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## Technical expertise & knowledge

**Server languages:** Ruby, Python, Java, Javascript

**Application languages and Markup:** PHP, Javascript, HTML5, CSS/SCSS

**Database:** MySQL, Postgres, AWS Redshift, MongoDB, AWS DynamoDB

**Networking:** OSI model, TCP/IP, UDP/IP, SSL/TLS, LAN networking, Wifi (802.11a/b/g/n/ac)

**Web technologies:** Apache Server, MVC Design Pattern, Rails/Ruby, Codeigniter/PHP, Angular.js, ES6, RESTful API's.

**Cloud technologies:** HTTP, TCP/IP, AWS, Google cloud compute, UNIX, Virtualbox, Docker

**Team tools:** Git, Github, Bitbucket, JIRA, PivotalTracker, Trello

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## Open source

**Trace.js** | Code [github.com/camargo/tracejs](https://github.com/camargo/tracejs) | Hosted [camargo.github.io/tracejs](https://camargo.github.io/tracejs)  
A pure client-side ray-tracer, written from scratch in TypeScript and Angular.js

**json-logic-ruby** | Code [github.com/szimmer1/jlr](https://github.com/szimmer1/jlr)  
Ruby implementation of the json-logic spec ([jsonlogic.com](https://jsonlogic.com))

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## Education

**University of California, Santa Cruz      September 2010 – June 2015**

**Computer Science B.A. with Honors / Biochemistry B.S. with Honors**

3.65 GPA | Honors and awards: Dean's honors, Singapore International Pre-Graduate Award

**References available per request**