Vivian G. Brown

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Portfolio: **vivianbrown.net** • GitHub: **github.com/vbrown608**

PROFESSIONAL EXPERIENCE

Software Engineer Electronic Frontier Foundation (May 2015 – present)
- Full stack web development in JavaScript, Rails, Python, and PHP
- Maintainer of EFF's Action Center, an open source platform in Rails for online organizing
- Substantially expanded rSpec and Cucumber test coverage. Implemented testing standards and CI
- Migrated Ruby, Python and JavaScript applications to Docker for production and development
- Collaborated closely with designers and staff members to manage project goals and timelines

Web Developer Quilted (June 2014-February 2015)
- Full-stack web development in JavaScript, PHP, and Drupal
- Behavior-driven development using Cucumber and Selenium
- Implemented subscription-based payment processing for a script sharing platform using Stripe API
- Worker cooperative following consensus based decision making model

IT Researcher/Analyst Forrester Research (October 2012-April 2014)
- Wrote syndicated research on Agile software development, requirements definition, cloud platforms, and predictive analytics tools for senior leaders in Fortune 500 IT organizations
- Automated team processes in Visual Basic and JavaScript including integration with Salesforce via OAuth2
- Worked on 3,000+ respondent surveys including survey design, data cuts, and analysis

Machine Learning Research Assistant to Dr. Xiaoli Fern, Oregon State University (Summer 2010)
- Working in C++, applied predictive analysis and machine learning techniques to bioacoustic data
- Collected and summarized research on bioacoustic data analysis with focus on random forest algorithm

OTHER RELEVANT PROJECTS

Yehos, 2017 (https://github.com/domspad/yehos)
- A kernel and operating system written in C for the Intel 386 processor
- Implemented virtual memory, demand paging, and cooperative multitasking
- Implemented Forth, a stack-based programming language, in x86 assembly to run on the Yehos kernel

Cryptolog, 2017 (https://github.com/vbrown608/cryptolog)
- An IP address anonymization tool for system administrators in Go

Chat2Chat, 2017 (https://github.com/vbrown608/chat2chat)
- A peer-to-peer distributed chat client in Node/JavaScript
- Implements the Scuttlebutt distributed gossip protocol, relying on LevelDB for persistence

Open Disclosure Oakland, 2014 (https://github.com/openoakland/opendisclosure)
- Volunteer project as part of Code for America's Oakland Brigade
- Developed interactive, map-based visualizations of campaign finance data in Backbone and D3

EDUCATION

Pomona College, Claremont, CA 2007-2011
Bachelor of Arts in Cognitive Science
Minor in Computer Science
Cum Laude, GPA 3.81/4.00
Teaching assistant for 'Data Structures' and 'Fundamentals of Computer Science' (Java, C++, and SML)
Undergraduate thesis in **machine translation**

- Identified features of simple sentences based on models of linguistic complexity
- Working in Java, re-ranked the output of a probabilistic phrase-based translation model using a support vector machine re-ranker to improve machine translation

Coursera Cryptography I, completed June 2015

Recurse Center, a self-directed programming sabbatical, completed Spring 2017