Renfred Harper

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Education

Fall 2011 - **B.S. Computer Science**, *George Mason University*, Fairfax, VA.
Spring 2015 GPA 3.8 / 4.0

Experience

Summer 2015 - Present
Software Engineer, *Sourcegraph*, San Francisco, CA.
- Developed full-stack features for a code-search and code browsing product with Go and Typescript.
- Worked on real-time distributed text editing and filesystem manipulation systems.
- Maintained our GraphQL authentication and data access API using Redis and PostgreSQL.
- Created and scaled static-analysis services for Python and Swift.

Summer 2014
Software Developer Intern, *Shopify*, Ottawa, ON.
- Worked as part of a team of engineers developing and maintaining a Ruby on Rails web application that supported the retail operations of over 100,000 merchants.

Fall 2013 - Summer 2015
Software Developer, *Triple Tech Inc.*, Reston, VA.
- Developed an indoor mapping web application for monitoring the conditions of fire safety equipment deployed in nuclear power plants using the Grails framework and JavaScript.

Fall 2013
Undergraduate Teaching Assistant, *GMU Computer Science Department*, Fairfax, VA.
- Assisted professors with instructing an introductory programming course in Python.

Summer 2013
Web Developer, *Freelance*, Fairfax, VA.
- Developed new brochure website and administration backend for managing event data for a university events production department using JavaScript and PHP.

Projects

CompileBot, `github.com/renfredxh/compilebot`.
- A bot written in Python that can execute source code in comments on reddit by a user's request.
- Developed a spam detection algorithm that can notify moderators if usage of the bot is abused.

Snueue, `github.com/renfredxh/snueue`.
- An application built using Python and Flask that loads and plays an automated queue of media based on crowdsourced submissions on reddit.
- Created a media controller that uses the React JavaScript framework to dynamically display audio and video using various interfaces including the YouTube embedded Player API.

Pulse, `github.com/renfredxh/pulse`.
- An interactive web-based instrument built using Ruby on Rails and Backbone.js.
- Developed a client-side application for dynamically loading and playing dozens of audio files synchronously.

Technical Skills

Languages: Go, Python, TypeScript, JavaScript, HTML/CSS
Tools: Docker, Kubernetes, React, Flask, Git, Linux/UNIX

Extra

- Contributor to open source projects - see `https://github.com/renfredxh`
- Winner of the BitCamp 2014 hackathon for "Best Big Data Visualization"
- Treasurer of GMU Student-Run Computing and Technology