

TIM SIWULA

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<http://itimmy.com/github> | <http://itimmy.com/linkedin> | <http://itimmy.com/resume.pdf>

Education

University of San Francisco (USF), San Francisco, CA

May 2017

Bachelor of Science in Computer Science

Courses: Algorithms, Parallel Programming, Software Development, Programming Languages, Linear Algebra & Probability

Skills

Languages: Fluent in English, Elementary in Mandarin

Programming Languages: Java, C, Javascript, Python, Objective-C, Bash, Git, MYSQL, HTML, CSS

OS Platforms: Unix/Linux, OS X, iOS

Protocols: SSH, TCP/IP, DNS, HTTP

Frameworks: Angular, Bootstrap, Express, AWS, Heroku

Experience

iOS Developer: SF Dev Shop, San Francisco, CA

January 2016 - Present 2016

- Incrementally updated Objective-C iOS App
- Updated Storyboard's and debugged user interactions and animations

Science Web Programmer: Berkeley Labs, Berkeley, CA

May 2014 - October 2014

- Ported linux OS & network file system to a new architecture
- Developed a front-end Web App with Javascript using Google App Engine

Individual Independent Projects

Bootstrapping AWS Autoscaling Script

July 2016

- A terraform script that bootstrap's an autoscaling group on an empty AWS account
- Instances install nginx using a remote-exec provisioner and are accessible over an ELB

Universal Linux Install Script

July 2016

- A bash script that will run on any linux distribution
- Installs the latest versions of docker, go, mysql and nginx and verify's the installation

Individual Academic Projects

Interactive Java Shell: Programming Languages

August 2014 - December 2014

- Developed an interactive Java shell program that parses, compiles, loads and executes java code
- Each line is parsed and determined to be a declaration, statement, syntax error or nested character stream
- Valid Java code is compiled to a new class that inherits from the previous line and is dynamically loaded into the JVM
- Worked with the Reflection API, the JavaCompiler API and Classloader

Huffman File Compressor: Data Structures & Algorithms

January 2015 - May 2015

- Developed a Java program that compresses and uncompresses files using Huffman coding
- Implemented a Huffman tree for all characters in the file and a lookup table for the codes of all characters in the file
- Reads files and calculates the frequencies of all characters

Inverted Index & Partial Search: Software Development

August 2015 - December 2015

- Developed Java modules for a search engine featuring a inverted index data structure and partial search capability
- Parse text files and build a table for each where table is saved to disk