

SKYLAR SHYU

EDUCATION

University of Utah – B.S. in Computer Science

Aug. 2015 – May 2019

Relevant Coursework: Algorithms; Computer Systems; Database Systems; Intro. to Scientific Computing; Mobile App Development; Natural Language Processing; Programming Languages; Software Practices I & II; Web Software Architecture; Visualization for Data Science

WORK EXPERIENCE

Symantec Corporation

Draper, UT

Software Engineering Intern

May 2018 – Aug. 2018

- Automated the continuous integration (CI) testing process using Python scripts and Jenkins
- Wrote 300+ unit tests in Python to test both UI (REST API) and CLI functionality of software builds
- Reduced the run time of CI tests by 75% via executing concurrent subprocesses
- Created a dynamic website using Python's Tornado framework, front-ended with Nginx
- Designed, implemented, and documented a SQLite3 database to hold parsed XML results
- Visualized test results via D3, rendering a layout partition chart denoting skipped, passed, and failed tests

University of Utah – IT (UIT)

Salt Lake City, UT

Campus Web Hosting Intern

Jan. 2018 – May 2018

- Re-wrote and stress-tested a Python script that SSH'd into Linux webhosts to pull server metrics
- Configured, standardized, and migrated over 13 sites from test to prod environments using Puppet and ensured their certificates were up-to-date and installed properly

TECHNICAL EXPERIENCE

Personal Project: Course Watcher

Jul. 2017 – present

An application to notify users when a UofU course has a seat available (when waitlisting is disabled)

- Using an MVC design, developed the controller to poll for course availability every 30 seconds in Python3, pushing notification via SMS or email when a seat becomes available

Personal Project: Personal Server

Jul. 2017 – present

Refurbishing an office machine into a personal gaming/web/experimentation server

- Stood-up private MineCraft, RuneScape, and TeamSpeak3 servers
- Configured DDNS records and enabled port forwarding, allowing external access to hosted instances
- Currently trying to teach myself Docker and Kubernetes

Work Project (UIT): ServiceNow Visual Task Board Replacement

Sept. 2017 – Dec. 2017

Produced a proof-of-concept replacement for an AGILE board to organize the internship application pool

- Installed a LAMP stack on an Ubuntu 16.04 box, including an SSL certificate on the server
- Implemented LDAP authentication to verify logins and established different levels of permission in Java
- Began designing the web application using JSP and jQuery UI

Class Project: FFMPEG

Feb. 2017 – May 2017

Explored a largely undocumented codebase to code a .mp4 movie with super-imposed graphics in C

- Produced an image codec, both the encoder and decoder, based on the .bmp codec
- Created a 10 second MP4 by repeatedly drawing/superimposing pixels to an existing image source's data
- Wrote a makefile to efficiently compile, clean, and execute the custom codec application

LANGUAGES & TECHNOLOGIES

Languages: C/C++; C#/Java; HTML/CSS; Javascript, JSP; MatLab; MySQL; PHP, Python; R; Ruby

Environments: Linux (CentOS/Ubuntu/Fedora); Windows 7/8/10; MacOS

Tools: Adobe Suite (Dreamweaver, Illustrator, InDesign, Photoshop); Apache; Eclipse; Git; Jenkins; MatLab; MySQL Workbench; Nginx; Puppet; PuTTY/Terminal; Rails; Supervisor; Visual Studio; VMWare