SKYLAR SHYU

EDUCATION

Salt Lake City, UT **University of Utah** *Aug. 2015 – May 2019*

- B.S. in Computer Science

WORK EXPERIENCE

Draper, UT **Symantec Corporation** *May 2018 – Aug. 2018*

Software Engineering Intern

- Automated the continuous integration (CI) testing process through 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 on software builds 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 results
- Visualized test results via D3, rendering a layout partition chart denoting skipped, passed, and failed tests

Salt Lake City, UT **University of Utah – IT (UIT)**

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 all up-to-date and installed properly

Student Lead Intern *May 2017 – Dec. 2017*

- Standardized student program processes by creating documentation, reducing miscommunication
- Wrote code to automate redundant processes and to allow future scalability of the internship program

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 to allow external access to hosted instances

Work Project: ServiceNow Visual Task Board Replacement *Sept. 2017 – Dec. 2017*

Produced a proof-of-concept replacement for an AGILE board to organize our applicant 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 establish 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

- Produced an image codec, both the encoder and decoder, based on the .bmp codec in C
- Created a 10 second MP4 by writing C function calls that repeatedly drew, superimposed, and added pixels to an existing image source's pixel data
- Wrote a makefile to efficiently compile, clean, and execute the custom codec application

Class Project: Spreadsheet *Feb. 2017 – Apr. 2017*

Created and utilized dynamic-link libraries to develop a spreadsheet application

- Utilized event listeners and handlers to interface between the GUI and backend
- Optimized code coverage and analyzed performance using Visual Studio tools
- Ensured spreadsheet sustainability via unit testing

LANGUAGES, TECHNOLOGIES & CERTIFICATIONS

Languages: C/C++; C#/Java; HTML/CSS; JSP; MatLab; MySQL; Python; R; Ruby; shell scripting (Bash)
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; Office 365; Puppet; PuTTY/Terminal; Rails; ServiceNow; Supervisord; WingIDE; Visual Studio; VMWare