

SKYLAR SHYU**EDUCATION****University of Utah – B.S. in Computer Science***Aug. 2015 – May 2019***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 and JavaScript, 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
- Assisted with FedRAMP efforts by creating AMIs from VDIs for cloud deployment

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] Final Fantasy XIV (FFXIV) Cross-World Hunt Tracker***Dec. 2018 – present*<https://crossworld-hunts-xiv.herokuapp.com/>

A web-app that consolidates and renders accurate spawn windows for hunt mobs

- Currently in alpha with 10 users providing testing and feedback, with an anticipated beta of 200+ users by early-March
- Replaces the need for users to toggle between 3 separate sites to determine when a mob is available for spawning
- Using AJAX, created a dynamic UI that update a mob's status upon timer expiration or user report
- Wrote backtracking methods to ascertain in-game environmental conditions at a mob's time of death
- Designed and implemented a PostgreSQL database to hold information regarding mobs and their time of deaths

[Class Project] U.S. Source Rock Geochemical Data Visualization System*Oct. 2018 – Dec. 2018*<https://psshyyu.github.io/dataviscourse-GeochemOilandGas/>

Using D3, visualized the likelihood of oil/gas production using a dataset with over 50,000 rows

- Wrote well over 95% the code for the project: navigation, CSS styling, classes for the charts, etc.
- Created 5 interactive charts complete with tooltips and toggleable filters to encourage user exploration
- Recorded a screencast to explicate the goal and purpose of the project

[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, PostgreSQL, Python; R**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; Visual Studio; VMWare