

EDUCATION

Bachelor of Science, Computer Science

University of California, Santa Cruz – 3.78 GPA

Jun 2017 – Dec 2020

EXPERIENCE

IBM | Software Development Intern

Jun 2019 – Sept 2019

- Created a tool to proactively identify security violations in Active Directory, accelerating issue detection time from 30+ days to a single day and ensuring continuous compliance with security policies
- Developed a physical access database for managing access to 40+ data centers, replacing manual monthly audits with a continuous source of truth
- Built internal tools to automate audit workflows, saving tens of thousands of dollars annually
- Implemented a web app to display live audit health and identify bottlenecks using Flask and Elasticsearch DSL
- Wrote unit tests to automate tools testing using Pytest

Second Harvest Food Bank | Software Engineering Intern

Mar 2019 – Jun 2019

- Deployed a mobile-ready web app for matching users with nearby food banks using Flask
- Integrated with Google Maps to visualize food bank distance and quickly generate directions
- Integrated with Google Calendar, allowing non-technical employees to update food bank locations and times
- Conducted user testing to better serve communities that may not have access to computers
- Coordinated with project stakeholders to establish project specifications and timelines

SELECTED PROJECTS

Distributed Data Storage using Docker Containers | Python, Flask

- Built a remote storage solution that allows Docker containers to store key-value pairs as a distributed system
- Created a REST API using Flask for client communication and node additions
- Implemented a data sharding system, which allowed the system to scale linearly in capacity and throughput
- Ensured crash tolerance through data replication and automated data resharding
- Developed a message versioning system to enforce causal consistency between requests

Search Engine | Python, NLTK

- Designed a system that answers a question by returning the most relevant excerpt from a library of text
- Implemented natural language processing techniques such as dependency parsing and discourse modeling

Project Release Dashboard | Javascript, React, Node.js, Express

- Deployed a web app for monitoring public reception to project releases on social media
- Integrated with Twitter and Reddit to source data, and employed Watson NLP to derive actionable data
- Presented finished product to IBM executives for internal and market applications

Sentiment Analysis Discord Bot | Javascript, Node.js, Python, NLTK, SciKit Learn, SQLite

- Implemented a Discord bot designed to promote positive user engagement by rewarding points
- Trained Decision Tree, Naive Bayes, and SVM models to classify user sentiment using NLTK and SciKit Learn
- Increased classification accuracy by 60% by improving feature selection with techniques such as lemmatization

ACHIEVEMENTS

HackACM 2019 3rd Place Winner | Python & Flask

Apr 2019

Built a class lookup service for both web browsers and Amazon Alexa voice assistants

HackACM 2018 Student Utility Category Winner | HTML, CSS, & Bootstrap

Mar 2018

Created a mobile website to connect incoming UCSC students with campus resources and activities

SKILLS

Languages: Java, Python, Javascript, C, HTML, CSS, Assembly, SQL, MATLAB
Technologies: React, Node.js, Flask, Pytest, Bootstrap, NLTK, Scikit Learn
Software & Tools: Git, Docker, Elasticsearch, Kibana, Linux, JIRA, Confluence, Make