

EDUCATION

Bachelor of Science, Computer Science

June 2017 – June 2020

University of California, Santa Cruz – 3.78 GPA

EXPERIENCE

IBM | Automation Dev and Testing Intern

June 2019 – September 2019

- Developed tools to automate evidence collection for security audits against IBM Cloud
- Created a dashboard to monitor audit health using Flask and JIRA API
- Developed Elasticsearch queries to identify audit bottlenecks using Elasticsearch DSL and Kibana
- Accelerated issue response time by automating reports through email and JIRA

Second Harvest Food Bank | Software Engineering Intern

April 2019 – June 2019

- Developed and deployed a mobile-ready webapp for matching users with nearby foodbanks 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
- Coordinated with Second Harvest to establish project specifications and timelines

SELECTED PROJECTS

Distributed Data Storage using Docker Containers | Python & Flask

March 2018 – June 2019

- Developed a remote storage solution that allows Docker containers to store key-value pairs
- Created a REST API using Flask for client communication and message broadcasting
- Improved storage capacity and throughput by implementing a data sharding system
- Ensured crash tolerance through data replication and automated data resharding
- Developed a message versioning system to enforce causal consistency between messages

Search Engine | Python & NLTK

February 2019 – March 2019

- 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 word lemmatization
- Created a question classification system that applies different rulesets for answer selection
- Developed a discourse model for associating pronoun sentences with their appropriate noun

HTML Document Builder | Javascript & React.js

December 2018 – January 2019

- Created a scratchpad to help beginners quickly draft HTML documents using building blocks
- Developed an algorithm to convert input components into formatted HTML via tree traversal

Discord Sentiment Analysis Bot | Javascript & Node.js

September 2018 – June 2019

- Implemented a Discord bot designed to promote positive user engagement by rewarding points
- Optimized memory usage by automatically processing messages after certain conversation triggers
- Added database importing and exporting functionality using SQLite
- Deployed on Raspberry Pi with automated crash recovery

ACHIEVEMENTS

HackACM 2019 3rd Place Winner | Python & Flask

April 2019

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

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

March 2018

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

SKILLS

Languages: Java, Python, Javascript, C, HTML, CSS, Assembly, Perl, Scheme, Prolog
Technologies: React.js, Node.js, Flask, Express, Bootstrap, SQL, MATLAB, Swing
Software & Tools: Git, Docker, Postman, Elasticsearch, Kibana, Linux