

Education

Bachelor of Science, Computer Science

June 2017 – June 2020

University of California, Santa Cruz – 3.78 GPA

Experience

Software Engineering Intern | IBM

June 2019 – September 2019

- Created a project management dashboard to monitor project health using Python and Flask
- Developed Elasticsearch queries to quickly identify project bottlenecks using Elasticsearch DSL and Kibana
- Updated project status data using JIRA API
- Accelerated management response time by automating project reports through email

Software Engineering Intern | Second Harvest Food Bank

April 2019 – June 2019

- Developed and deployed a mobile-ready webapp to match 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 for my team

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
- Ensured crash tolerance through data replication and automated data resharding
- Implemented data sharding to optimize capacity and throughput
- Developed a message versioning system to enforce causal consistency between messages

NLP Question Answering System | Python & NLTK

February 2019 – March 2019

- Designed a system that answers any question by identifying the most relevant excerpt from a library of text
- Implemented a question classification system that applied different rulesets for answer selection
- Optimized answer F-measure using NLP techniques such as dependency parsing and word lemmatization
- 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 through a point system
- 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, C, Javascript, HTML, CSS, SQL, MATLAB
Frameworks: React.js, Node.js, Flask, Bootstrap
Software & Tools: Git, Docker, Postman, Elasticsearch, Kibana