

Work Experience

Freelance Developer Raleigh, NC

HARVARD LAW SCHOOL

January 2022 - November 2022

- Developed an Electron application using JavaScript, Bootstrap, HTML, Sass, and chart.js to calculate and compare fares for autonomous taxis
 based on vehicle drive train types
- Worked closely with clients to define and meet nebulous project requirements

Amazon Denver, CO

SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2022 - August 2022

- Designed, implemented and tested enhancements to customer facing APIs to add for support the WPA3 WiFi security standard to a service that automatically connects customer's Amazon devices to their networks using Java, JUnit, Postman, Guice and Mockito
- Led educational workshops on WiFi security standards for team members and partner teams
- · Wrote clear code, unit tests, integration tests, and participated in code review processes

Delta Air LinesAtlanta, Georgia

DATA ENGINEERING INTERN

August 2021 - Dec 2021

- Built and trained a text classification model using scikit-learn, NumPy, and pandas to automate the classification of injury incidents into 30 categories based on the incident report with 86% accuracy
- Parsed and sanitized raw data for machine learning applications
- · Wrote queries in SAS and SQL to generate reports on key business metrics used daily by organization leadership
- Investigated team switch from SAS and Teradata SQL to Python to potentially save \$300,000 per year

Fidelity Investments

Durham, North Carolina

SOFTWARE ENGINEERING INTERN

June 2021 - August 2021

- Implemented a Python script to optimize the scheduling of Splunk saved searches and alerts reducing log query times by 25% for all Fidelity business units using the Splunk REST API
- · Saved 5 hours per week of administrative time by automating daily financial reporting procedures
- · Translated broad business objectives into efficient, readable, and maintainable code within an agile environment

Education

North Carolina State University

Raleigh, North Carolina

August 2019 - May 2023

B.S. Computer Science, Minor in Philosophy

- Summa Cum Laude 3.78 GPA
- Research Assistant in the Secure Software Supply Chain Center
- Semester Dean's List Fall 2020 to Spring 2023

Projects and Activities

Team Lead + Individual Contributor

SENIOR DESIGN January 2023 - May 2023

- Managed a team of 4 other students to create a pinball companion app to help pinball players locate pinball machines, track their scores, and compete with other players globally
- Led task planning, project scoping, and scheduled sponsor meetings
- Contributed to our application's front end, a cross platform mobile app written in Flutter using Firebase for authentication, the Google Maps SDK to display a map, and an NFC reader to link users to their pinball scores
- Contributed to our application's back end, a Java 11 Jersey server running in a Docker container on Google Cloud Run connected to a MySQL database in Google Cloud SQL
- · Built CI/CD pipeline for team to automatically test and deploy the most recent successful git push to Google Cloud

Engagement Manager (January 2023 - May 2023)

Consult Your Community

August 2021 - May 2023

- Managed a team of 5 other students to create and visualize new internal recruiting metrics using python, and Streamlit
- Pioneered technical work within the organization as a Business Analyst and led the first entirely technical engagement as an Engagement Manager

Skills

AngularJS, Bootstrap, C, CSS, Docker, Electron, Flutter/Dart, Git, Github, Gradle, Guice, Hibernate, HTML, Java, JavaScript, Jenkins, JUnit, Linux, Maven, Mockito, NumPy, pandas, Postman, Python, Sass, Splunk, Spring Boot, SQL, Streamlit, Google Cloud Platform, spaCy

May 24, 2023 Jonathan Buck 1