HASHIM ASAD

hashimas@umich.edu | (734) 773-8503 | hashimasad.com

EDUCATION

University of Michigan, Ann Arbor, MI
Bachelor of Science in Engineering in Computer Science Dec 2023
GPA: 3.89/4.00
Coursework: Intro to Operating Systems, Web Systems, Intro to Computer Security, User Interface Development, Data Structures and Algorithms

EXPERIENCE

Amazon Web Services, Seattle, WA
Software Development Engineer (SDE) Intern May 2022 - July 2022

- Migrated Scala logic from internal tools to Native AWS services (EC2 instances), consolidating jobs to relevant servers belonging to team.
- Automated manual steps, critical to product operated in planning of 25+ AWS services, streamlining process for team engineers and enabling greater scalability for expanding to additional AWS services.
- Leveraged Amazon Athena querying and S3 cloud storage to extract and validate information from large datasets, generating summarized data for use in reports and time series visualizations.

OrdrAi, Ann Arbor, MI
Start-up providing text ordering chatbot service to restaurant chains; later acquired by HungerRush.
Software Engineering Intern June 2019 - Aug 2019

- Developed alternate order managing interface using Python and Raspberry Pi connected to thermal printer, resulting in streamlined order processing procedure for restaurant chains.
- Designed program to web scrape restaurant menus from GrubHub using browser automation with Selenium, enabling increased operational efficiency in verifying menu items.
- Improved chatbot ordering service by exposing dozens of bugs through QA testing, leading to fixes in production.

PROJECTS

Google Docs Add-on (Img to Docs):
Personal Project, Sole Contributor

- Built Google Docs add-on application allowing users to easily extract text from images and insert it as paragraphs and bullet points within document.
- Utilized Tesseract.js to apply Optical Character Recognition (OCR) and Google Apps Script to interface with Google Docs and insert text.
- Implemented animations for OCR progress and file drag and drop using JavaScript and CSS, creating reactive UI.
- Published add-on for free to Google Workspace Marketplace, where it has grown to 70K+ users.

Traveling Salesman Route and MST Generator:
Course Project, Sole Contributor

- Developed C++ program to produce Minimum Spanning Tree (MST) or solve Traveling Salesman Problem (TSP) given vertices as input.
- Utilized Prim’s algorithm to generate MSTs, finding least cost solution to connect all vertices.
- Implemented branch-and-bound algorithm for optimal TSP solution and Nearest Insertion algorithm as heuristic.

Custom Data Collection Website (FIRST Robotics Competition Scouting Webpage):
Individual Project, Sole Contributor

- Created web page enabling users to log data by interacting with representations of game elements from 2019 FIRST Robotics Competition (FRC) game.
- Designed interactive input interface using HTML, CSS, and JavaScript, building efficient, engaging way to collect data about other teams.
- Leveraged Google Sheets API and Python (Flask) to record data to Google Sheet spreadsheet, allowing for quick access and sharing of data within team.

SKILLS

Computer Languages: C++, Python, Scala, JavaScript, HTML/ CSS
Technologies: Xcode, IntelliJ, VSCode, Git, MacOS, Linux
Machining: experience using band saw, miter saw, drill press, mill, and lathe.