Zohair ul Hasan

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EDUCATION

DREXEL UNIVERSITY
B.S. in Computer Science
Expected Graduation June 2024 | Philadelphia, PA
GPA: 3.85

TECHNICAL SKILLS

PROGRAMMING LANGUAGES & LIBRARIES
Python3, Node.js & JavaScript/ES6, Express.js, React, FastAPI

OTHER
Docker, Kubernetes, Terraform, Jenkins, PostgreSQL, MongoDB, Git

PROJECTS

MARKETSIM
(January 2022 - March 2022)
gitlab.com/Zohair-coder/market-sim

Led a team of 4 to create a stock market simulator to invest with virtual currency using React.js, Node.js, PostgreSQL and web sockets to get real time stock data

WHAT'S IN YOUR FRIDGE?
(September 2021 - March 2022)
gitlab.cci.drexel.edu/ci102-3teaml/whats_in_your_fridge

Led a team of 5 to create a React webapp to help users find recipes based on ingredients they have in their fridge

DREXEL COURSE NOTIFIER
(September 2020 - October 2020)
github.com/Zohair-coder/Drexel-Course-Availability-Notifier

Built a web-scraper in Python3 that notifies students via email when their selected course has available seats, impacting over 130 students at Drexel University

SAP HACKATHON
(July 2022)

Participated in a Hackathon and worked primarily on the backend, using Node.js and MongoDB

EXPERIENCE

SAP AMERICA
Software Eng. Intern - Artificial Intelligence
April 2022 - Current | Philadelphia, PA

- Contributed to an open-source ML platform (ML Lab github.com/SAP/machine-learning-lab) that acts as a centralized hub for development teams to seamlessly build, deploy, & operate ML solutions at scale
- Integrated an open-source solution, ML Flow, into ML Lab for tracking parameters, metrics & artifacts for each run using Python, FastAPI & React
- Created custom plugin in Python for ML Flow to seamlessly work with ML Lab's JSON and file storage
- Wrote tests for plugin using pytest to ensure quality/reliability
- Developed a Job Scheduler component that ran user specified jobs on a repeated schedule by parsing a cron string
- Implemented Readers-writer lock to avoid race conditions
- Debugged and fixed small issues with ML Lab using React and Python to improve user experience

SAP AMERICA
Software Eng. Intern - Production Management Portals
April 2021 - March 2022 | Philadelphia, PA

- Developed and deployed a webapp, and an accompanying Terraform Provider written in Go to report virtual machines in use to SAP's internal auditing system
- Built a front end in vanilla JavaScript and a backend in Node.js
- Deployed apps using Docker and Kubernetes to improve reliabliability and scalability of the webapp
- Created Jenkins pipelines to automate the testing and deployment of the webapp and Terraform Provider by automatically pushing newly built webapp images to a registry and uploading the Terraform Provider executable to an Openstack objectstore
- Created a private Terraform registry to allow for easy Provider installation
- Wrote tests for the webapp and Terraform Provider using MochaJS, Selenium (Python) and Go to ensure quality/reliability
- Developed Ruby script to process billing data from Dynatrace and upload to Kibana for visualization and analyzation, reducing bill cost by 30%
- Wrote Terraform modules to improve productivity for employees

DREXEL COLLEGE OF COMPUTING AND INFORMATICS
Teacher Assistant
April 2021 - Current | Philadelphia, PA

- Created and sold a program designed to improve grading efficiency by a factor of 20 for $500
- Helped students understand complex concepts in Computer Science and cleared confusions by attending regular office hours
- Graded student homework

DREXEL VERTICALLY INTEGRATED PROJECTS
Software Engineer
April 2020 - June 2020 | Philadelphia, PA

- Led a team of 2 to program a Raspberry Pi in Bash using FFMPEG (CLI program used to process video and audio) for recording video, compressing it, and uploading live stream to YouTube