Sami Ascha

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Education

Tufts University

Computer Science (BS) and International Relations (BA); Graduating February 2020

Relevant Coursework: Computer Architecture, Assembly Language, Data Structures, Discrete Math, Computation Theory, Computer Algorithms, Artificial Intelligence, Cybersecurity, Web Development, Calculus I/II/III

Experience

Fidelity Investments Data Engineering Intern – Enterprise Infrastructure, Summer 2019

- Used Python, R, and various SQL frameworks to develop database models, analytics and visualization components in order to gain insight into data that can be transformed into business intelligence.
- Gained exposure in Full Stack Development using Angular, Flask, RESTful APIs, and Docker for building web applications to track firmwide power usage.
- Worked closely with project managers through daily standups and presented my work to senior management

UBS Software Engineering Intern – Analytics Technology, Summer 2018

- Used SQL query engines like Impala and Hive to transform and analyze upwards of two million daily revenue reports on the team's Hadoop database cluster.
- Automated daily statistical reports and models using R and various SQL analytics engines
- Contributed to design documents outlining a new database framework and presented my findings to Senior VPs in the Analytics Technology department
- Developed an office resources service UI developed in JavaScript as part of the intern hackathon.

Tufts University Financial Aid

Student Employee, June 2017 – May 2018

- Responsible for Excel-based data analysis and organization of highly confidential loan information through a variety of restricted databases utilized by the university.
- Updated loan accounts through the University Accounting Service (UAS)

Jusoor for Syria

Assistant Instructor, Summer 2016

I spent two months in Eastern Lebanon working as an assistant teacher instructing Syrian refugees (ages 6-13) in areas such as English, general science, and arts/crafts. Jusoor, the NGO I worked for, operates several refugee schools near the Syrian border.

Skills & Interests

Languages: C, C++, Python, JavaScript, TypeScript, HTML/CSS, SQL, R, shell, Java

Frameworks: React, Node, Angular, Flask, Spring, Django, Git, Docker, Jenkins, Ansible, AWS

Data: Hadoop, HBase, Oracle, MongoDB, Impala, Hive, Tableau, NumPy, Redis, Pandas

Certifications: Bloomberg Market Concepts, CITI Program Research Ethics and Compliance Training

Other: MS Office, Adobe Photoshop and After Effects, Agile development, options trading

Notable CS Projects

Lossy Image Compressor (~2.8% loss after decompression) (C)

Geolocation Database Server using MongoDB and Google Maps API (JavaScript) Stepwise Regression Model for Predicting Sulfur Dioxide Emissions (Python)

Power Usage Dashboard for Fidelity Investments (Angular, Python)
Z-Score Report Automation API for UBS (Hive/SQL, R)