

Sami Ascha

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Education

Tufts University

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

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

Experience

Fidelity Investments

Data Engineer – Intern, 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 to build a web application to track firmwide server usage. Worked with senior engineers to push the project to production.
- Performed statistical analysis using Pandas and NumPy to determine optimal server allocation
- Worked closely with project managers through daily standups and presented my work to senior management

UBS

Software Engineer – Intern, 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:	Oracle, MongoDB, Hadoop, HBase, Redis, Impala, Hive, Tableau, NumPy, Pandas
Certifications:	Bloomberg Market Concepts, CITI 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++)
Stepwise Regression Model for Predicting Sulfur Dioxide Emissions	(Python)
Geolocation Database Server using MongoDB and Google Maps API	(JavaScript)
Power Usage Dashboard for Fidelity Investments	(Angular, Python)
Z-Score Report Automation API for UBS	(Hive/SOL, R)