Sami Ascha

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Education

Tufts University

Computer Science (BS) and International Relations (BA); Graduating December 2019
Relevant Coursework: Computer Architecture, Assembly Language, Data Structures, Discrete Math, Computation Theory, Computer Algorithms, Artificial Intelligence, Cybersecurity, Calculus I/II



Experience

Fidelity Investments	Data Engineering Intern, Summer 2019
Use Python, R, and various SQL frameworks to develop database models, analytics and visualization	
components in order to gain insight into data that can be transfe	ormed into business intelligence. I am also
gaining exposure using RESTful APIs and Docker for deploying web applications.	
UBS	Software Engineering Intern, Summer 2018
As part of the Analytics Technology team, I used SQL query engines like Impala and Hive to transform and	
analyze upwards of two million daily revenue reports on our tea	
MicroStrategy reports and contributed to design documents outlining a new database framework. Other	
projects included identifying and implementing SQL unit tests, data lineage reports, and 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 data analysis and organization of highly confidential loan information through a variety of	
restricted databases utilized by the university. Mostly Excel work and updating accounts through the	
University Accounting Service (UAS).	
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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	

Skills & Interests

refugee schools near the Syrian border.

Coding Experience: C, C++, R, Python, Javascript, HTML/CSS, SQL, Git version control, shell Data Science/Databases: Hadoop, Oracle, Impala, Hive, MicroStrategy, NumPy, SciPy, R, SQL Foreign Language Experience: Arabic (fluent), Spanish (intermediate)

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

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

Notable CS Projects

Lossy Image Compressor (~2.8% loss after decompression) (C++)
Geolocation Database Server using MongoDB and Google Maps API (Javascript)
Internal Server Heatmap and Storage Timeline (Python backend, Angular frontend)
8-register Universal Machine and Assembler (C)
Z-Score Report Automation API (Hive/SQL, MicroStrategy)