

# Sami Ascha

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## Education

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### 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

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### Fidelity Investments

Data Engineering Intern, Summer 2019

As part of the Enterprise Infrastructure team, I 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. I also gained exposure using Angular, Flask, RESTful APIs, and Docker for building web applications to track firmwide power usage.

### 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 team's Hadoop cluster. I also worked on 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).

### 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

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<b>Languages:</b>	C, C++, Python, JavaScript, TypeScript, HTML/CSS, SQL, R, shell
<b>Frameworks:</b>	React, Node, Angular, Flask, Dropwizard, Spring, Django, Git, Docker
<b>Data:</b>	Hadoop, HBase, Oracle, MongoDB, Impala, Hive, Tableau, NumPy, Redis, Pandas
<b>Certifications:</b>	Bloomberg Market Concepts, CITI Program Research Ethics and Compliance Training
<b>Other:</b>	MS Office, Adobe Photoshop and After Effects, Agile development, options trading

## Notable CS Projects

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Lossy Image Compressor (~2.8% loss after decompression)	(C)
Geolocation Database Server using MongoDB and Google Maps API	(JavaScript)
Artificial Neural Network for Identifying Flower Species	(Python)
Power Usage Dashboard for Fidelity Investments	(Angular, Python)
Z-Score Report Automation API for UBS	(Hive/SQL, R)