Sami Ascha

// 6950 Norvale Cir W, Gates Mills, OH 44040 // 440-725-2586 // sami.ascha@tufts.edu // samiascha.github.io //

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
As part of the Enterprise Infrastructure team, I 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 transformed into business intelligence. I am also gaining exposure using Angular, Flask APIs, and Docker for building 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 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

Programming Experience: C, C++, 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 – please feel free to ask about them!

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)
8-register Universal Machine and Assembler	(C)
Z-Score Report Automation API	(Hive/SQL, MicroStrategy)