Sami Ascha

// 51 Upland Rd. Somerville, MA 02144 // 440-725-2586 // sami.ascha@gmail.com // samiascha.github.io //

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 conditions under which servers fail
- 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:	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++)
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/SQL, R)