

AMAR SHAH – SOFTWARE ENGINEER

San Francisco Bay Area, California | ahs268@cornell.edu | 702.528.7877
LinkedIn: [AmarHShah](#) | Website: a-shah19.github.io | Github: [A-Shah19](#)

TECHNICAL SKILLS

Python | Java | Golang | SQL | PyTorch | PHP | Julia | React | Git

EDUCATION

Cornell University: Bachelor's in Computer Science, Minor in Business

August 2015 – May 2019

Honors: Dean's List - Spring 2018, Meinig Family Cornell Honors Scholar

Coursework: Advanced Topic Modeling, Computer Vision, Entrepreneurial Strategy, Object Oriented Programming Data Structures, Natural Language Processing, Machine Learning, Operating Systems, Networks, Algorithms, Computational Genetics

WORK EXPERIENCES

IBM Cloud

August 2019-Present

Fullstack Engineer – Load Balancer as a Service

San Jose, California

- Led a transition to a new production monitoring service with the system backend in Golang, daily billing cron job in PHP, seamless live migration for 6 regions across the globe, and 5+ microservices
- Created database migration utilities in Python, reformatted data structures in Golang, and ensured no customer data was lost with PostgreSQL to facilitate a database migration shift from IBM DB2 to PostgreSQL
- Automated and optimized an image upgrade pipeline in Python to reduce maintenance windows from 5 days to 1 day
- Developed customer features such as HTTP traffic redirection and header logging at the layer 4 and layer 7 networking levels in PHP
- Contributed to design changes on the IBM Cloud Load Balancer consumer portal with React and Node JS
- Utilized the Agile methodology with a team of 8 engineers on 2 week sprints to close 30 issues per sprint using Github and Zenhub

Investment Technology Group (Virtu Financial)

June 2018-August 2018

Summer Technology Analyst

New York, NY

- Built a production data pipeline in Python to parse, clean, and analyze client orders involving over 100 million rows of data in SQL
- Conducted trend analysis in Python to identify inefficiencies and generate more effective order fulfillment strategies
- Visualized patterns and outliers with CGI-Pearl on collected data in a client-friendly web-portal hosted on HTML Apache Server

MIT Lincoln Laboratory

June 2017-August 2017

Summer Research Intern under Edward Kao

Lexington, MA

- Analyzed the structure and properties of large graphs (10,000,000+ edges), created k-way partition based on inter-partition properties
- Developed and coded a Partitioning Algorithm in Julia relying on the Stochastic Block model
- Increased graph processing framework capabilities by a space factor of 10² edges and speed complexity of 10² seconds using Julia

LEADERSHIP & PROJECTS

Covid Restaurant Capacity (Web app)

April 2020-Present

IBM Call for Code – COVID project

SF Bay Area, CA

- Rapidly created application displaying COVID compliant capacities to connect users with local restaurants and avoid large crowds
- Our team designed the UX and Frontend in React, utilized Google Places APIs, built backend databases in IBM Cloudant DBaaS

Machine Learning Teaching Assistant (CS 4780)

August 2018-December 2018

Teaching Assistant to Dr. Kilian Weinberger

Ithaca, NY

- Held office hours to review student questions across topics like Neural Networks, SVMs, Random Forests
- Helped write and grade homework assignments, group projects and exams in Jupyter Notebooks

AI Nutrition Advisor (Desktop App)

September 2018–December 2018

Senior Design Project

Ithaca, NY

- Trained Convolutional Neural Network on 10 classes of 100 images to classify foods and their nutritional info with Python and Keras
- Built Python desktop app to ingest images and output caloric and nutritional breakdowns

YaleHack Hackathon

December 2017

G-Pass: Revolutionizing Grocery Sharing

New Haven, CT

- Placed in Top 10 for Intuit Education Prize
- Built digital marketplace with Node.js that facilitates the exchange of excess and unused groceries with a POC backend in MongoDB

PERSONAL INTERESTS

Cooking ethnic foods | Landscape photography | Traditional South Asian dance (Raas-Garba)