

AMAR H. SHAH – SOFTWARE ENGINEER

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EDUCATION

Cornell University, Ithaca, NY

August 2015 - May 2019

Major in Computer Science, Minor in Applied Economics and Management

Coursework: Advanced Topic Modeling, Graduate Computer Vision, Technology and Entrepreneurial Strategy

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

RELEVANT EXPERIENCES

IBM Cloud

August 2019- Present

Fullstack Engineer – Load Balancer as a Service

San Jose, California

- Actively followed an Agile methodology with a team of 8 engineers on 2 week sprints to close 30 issues per sprint
- Co-led a transition to a new monitoring service touching the backend code transition, seamless live migration for 6 regions across the globe, and UI integration involving 5+ services and microservices with Golang and PHP [300+ LOC]
- Facilitated a shift from IBM DB2 to PostgreSQL involving creating database migration utilities and re-tooling data structures in GoLang and SQL [400+ LOC]
- Developed features such as HTTP traffic redirection and header logging at the layer 4 and layer 7 networking levels [100+ LOC]
- Automated and optimized an image upgrade pipeline to reduce maintenance from 5 days to 2 days with python scripts [400+ LOC]
- Contributed to design changes on the IBM Cloud Load Balancer consumer portal built on React and Node JS [80 LOC]

Investment Technology Group

June 2018-August 2018

Summer Technology Analyst

New York, NY

- Created a price prediction model using historical stock prices, real-time volatility, and a feed forward neural network architecture
- Built a production data pipeline to parse, clean, and analyze client orders using Python Pandas and SQL (100 million rows of data+)
- Conducted trend analysis to identify inefficiencies and generate more effective order strategies
- Visualized patterns and outliers in the collected data in a client-friendly web-portal using CGI-Perl

MIT Lincoln Laboratory

June 2017-August 2017

Summer Research Intern

Lexington, MA

- Analyzed the structure and properties of large graphs (10,000,000 edges) to create a k-way partition based on inter-partition properties
- Developed and coded a Partitioning Algorithm relying on the Stochastic Block model in Julia (300+ lines of code)
- Increased graph processing framework capabilities by space factor of 10² edges and speed complexity of 10² seconds

LEADERSHIP & PROJECTS

Covid Restaurant Capacity (Web app)

April 2019-Present

IBM Call for Code – COVID project

SF Bay Area, CA

- Rapidly created application that displays COVID compliant capacities for nearby local restaurants
- Developed backend with Golang and PostgreSQL integrated with React JS frontend
- Deployed in bay area to promote small business growth by connecting users with restaurants while avoiding large crowds

Machine Learning Teaching Assistant (CS 4780)

August 2018-May 2019

Teaching Assistant to Dr. Kilian Weinberger

Ithaca, NY

- Held office hours to answer student's questions on topics like Neural Networks, SVMs, Random Forests
- Helped write and grade homework assignments, group projects and exams.
- Taught small study groups of 15-20 people for 2 hours a week

AI Nutrition Guide (Desktop App)

September 2018 – December 2018

Senior Design Project

Ithaca, NY

- Collected and cleaned open source food image dataset
- Trained Convolutional Neural Network on 10 classes of 100 images to classify foods and their nutritional information
- Built 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
- Theorized and built interface for a novel and disruptive digital marketplace for exchanging excess, unused groceries
- Developed interactive interface using Node.js and Javascript as well as backend proof of concept with MongoDB.

SKILLS & INTERESTS

Technical Skills: Python, SQL, Golang, Java, PHP, Julia, Git, React

Languages: English, Spanish, Gujarati

Interests: Cooking ethnic foods, landscape photography, South Asian dance (Raas-Garba)