AMAR H. SHAH – SOFTWARE ENGINEER

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EDUCATION

Cornell University, Ithaca, NY   **August 2015 - May 2019**
Bachelor of Arts: Major in Computer Science, Minor in Applied Economics and Management
Coursework: Machine Learning, 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 10_2 edges and speed complexity of 10_2 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 PostgeSQL 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)