Naman Shah

Education

Stony Brook University, New York

August 2023 - Present

Masters of Science in Computer Science

GPA: 3.67/4.0

Coursework: Discrete Math, Data Science, Network Security, Visualization, Distributed Systems, TA CSE416

University of Mumbai, India

August 2019 - May 2023

Bachelor of Technology in Information Technology

GPA: 3.7/4.0

Coursework: Data Structures, Analysis of Algorithms, Operating Systems, Cloud Computing, Machine Learning Achievements: Smart India Hackathon 2022 Finalist, Amrita InCTF 2021 Finalist, CSI Enigma 2020 Winner

Technical Skills

Languages and Databases: Go, Python, C, C++, C#, JavaScript, MS SQL Server, MySQL, MongoDB Libraries and Frameworks: NumPy, Pandas, Tensorflow, Django, Flask, .NET, Node, React, Angular Developer Tools: AWS, Docker, Linux, Bash, Git, Kafka, Splunk, BitBucket, Terraform, JIRA, Confluence

Experience

Tesla May 2024 – Present

Software Engineer Intern | Go, Ginkgo, MySQL, Splunk, Kafka, Docker

Fremont, CA

- Introduced novel features and performance enhancements in Factory Software using Go to aid Model S, 3, X and Y production through end-to-end design, development, test and deployment across 6 Gigafactories
- Launched warehouse transfer workflow for Tesla Service Centers now facilitating move of 3000+ daily inventory volume across different regions with role based access control
- Collaborated with Operations Team on-site to engineer Kafka microservice performing part-location check prior to integrating serial inventory allowing 130% throughput in vehicle assembly lines
- Compressed address database archives down to 72% by inspecting Splunk logs and setting up pipelines for special character validation in EMEA region factories

Barclays Investment Bank

June 2022 - August 2022

Software Engineer Intern | C#, .NET, Python, MS SQL Server, AngularJs, LINQ

Pune, India

- Architected features for risk evaluation component of the Credit Sanctioning software handling flow of \$2.75 billion, coordinating with the Analyst team in an Agile environment
- Designed a complex database architecture to incorporate an approval workflow, built Python scripts to automate database population of 800+ approval scenarios in MS SQL Server, reducing hours of manual work
- Developed a comprehensive pipeline using C#, .NET, Entity Framework, LINQ and stored procedure calls for efficient data processing, further integrated with custom made AngularJs application UI via APIs

Prixled Tech

September 2021 – November 2021

Backend Developer Intern | Django Rest, Docker, Redis, Celery, AWS, PostgreSQL

Mumbai, India

- Delivered highly scalable logic implementation using Rest Framework, utilized Redis Celery combination to establish cron jobs for scheduled API triggers
- Containerized services using Docker, setup EC2, RDS, S3, Route 53 servers and configured Nginx with reverse proxy
- Spearheaded beta release of application, forming an efficient pipeline and migrating deploy from Heroku servers to Amazon Web Services, resulting in 67% reduction in response times

Projects

Jumproxy | Go, TCP, Kali, AES256, PBKDF2, SSH

CSE508: Prof. Polychronakis

- Built proxy server in Go to tunnel traffic between clients and publicly accessible TCP services, securing data transmission through two-way AES256 encryption
- Devised TCP fingerprinting tool running on Kali VM to identify and procure information on target range of 1000+ open ports through series of probe requests

WebDACE | PyTorch, RAKE-NLTK, LDA, Neo4j AuraDb, NumPy, Pandas

R&D: Prof. Ashwini Dalvi

- Trained multi-model service to analyze obscure URLs leveraging custom LDA classifier with 82% accuracy, semantic searches and Neo4j graphs visualizing cross-page topic associations on 120k training data
- Utilized TF-IDF and LSA summarization approach to publish analysis of 17k+ dark web archives in Microsoft Journal

QBaG | Django Rest, JWT, PostgreSQL, ReactJs, PyTorch

Smart India Hackathon 2022

- Formulated a crowdsourcing model for exams with an automated voting system through Django and ReactJs
- Implemented SBERT model for detection of semantically similar questions reducing database redundancy by 75%