Prateek Narendra

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EDUCATION

State University of New York at Stony Brook - NY, USA Aug 2019 - Dec 2020
Master of Science in Computer Science *GPA: 3.6/4.0*
Major Courses: Distributed Systems, Network Security, Data Science Fundamentals, Analysis of Algorithms, Probability and Statistics for Data Science, Theory of Database Systems

National Institute of Technology Karnataka - Surathkal, India Jul 2012 - May 2016
Bachelor of Technology – Information Technology *GPA: 8.2/10.0*

TECHNICAL STRENGTHS

Concepts Cybersecurity, Machine Learning, Data Modelling, Web Development, Algorithms, Project Management, System Design Principles, UI/UX, Distributed Systems
Software & Tools Java, Python, C/C++, Golang, Bash, SQL, MongoDB, JavaScript, Angular, React

EXPERIENCE

Visa Inc., Foster City - CA, USA May 2020 - Jul 2020
Senior Software Engineering Intern - Innovations Team

- ***Curbside Pickup App:*** Architected the Database and Middleware Design of the Application. Develop Backend modules in **Django** for User Registration, Store Management, Shopping Cart, Checkout, Payment processing, Store and Item Recommendation System. Collaborated with a remote, global team for Production Release.

Visa Inc., Bangalore, India Jul 2016 - May 2019
Software Engineer - Merchant Processing and Cybersecurity

- ***API DAST :*** Developed modules in **Python** and **Java** to verify SSL requirements, test Message Level Encryption, SQL Injection and OS Command Injection vulnerabilities in external APIs to enforce Visa Cybersecurity requirements and reduce average testing time by 15% for Penetration Testers
- ***Business Analyst Portal :*** Implemented modules for File Upload, Business Planning and User Access Control for a Web Application written in **Spring Boot** and **Angular**. Reduced Average Server Response Time of the application by 12% by integrating Server Side caching.
- ***Handover Automation Tool :*** Led the initiative to automate the aggregation of all the error reports from emails, alerts from **Splunk** and daily transaction volume dashboard from **Grafana** into a single report for presenting to upper management, saving roughly 20 minutes every day of manual work.

PROJECTS

- ***Mozilla Web Tracker Analysis***
  Analyzing the performance and efficiency of Firefox's Tracking Protection in blocking Webpage Ads without breaking website functionality on the Top 10000 Most Visited Websites by performing **Computer Vision** based Automated Screenshot Analysis and Monkey Testing
- ***Graph Based Recommendation System***
  Designed a system to recommend Twitter users to follow based on semantic information extracted from generated content and the underlying social graph structure to identify closely connected groups of users (cliques). Implemented clique algorithms to correct the interested topics a user is interested predicted by the ML models.
- ***Replicated State Machine***
  Implemented RAFT, a consensus algorithm, that manages a replicated log across multiple servers. Implemented in **Golang** which includes Leader Election, Log Replication, Persistence in case of failure.
- ***DevAuth - Device Based Federated Login (ETHOS Lab)***
  Developed a federated login system using **Django** and **React Native**, utilizing the user's phone as an authorization server for authentication/authorization. The system utilizes **OpenID** interfaces for easy integration by third party clients.
- ***Evaluation of various Dimensionality Reduction Algorithms***
  Devised methodologies for comparison of various Linear and Non-Linear dimensionality reduction techniques to explore their applications in data visualization and information retainment for processing. Researched and developed different qualitative and quantitative metrics for the evaluation of **PCA, UMAP and t-SNE**.