Sidharth Shyamsukha

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Education

New York University   September 2021-May 2023
Master of Science, Computer Engineering   GPA - 3.6/4
- Relevant Courses - Internet Architecture & Protocols, Computer Systems Architecture, Machine Learning, Datacenter & Cloud Computing, Deep Learning, Applied ML in Finance, Data Structures & Algorithms, Big Data.

Nirma University   July 2017-May 2021
Bachelor of Technology, Information Technology

Technical Skills

Languages: C, C++, Python, JavaScript, Java,PHP
Cloud Services: AWS, IAM, EC2, S3, Lambda, SNS, Google Cloud Platform(GCP) - Cloud Functions, GKE, Kubernetes
Web Technology: React, Angular6, Node, JSP, ES6, webpack, HTML, CSS3, CSS, SCSS, Bootstrap,NextJS
Databases & Testing: MySQL, MongoDB, Junit, Mocha, SQL, Hadoop, Spark, Extract, Transform, Load (ETL)
Tools & Libraries: GitHub, GitLab, Postman, Jenkins (CI/CD), YAML, JSON, Bitbucket, Microsoft Office, WordPress, JIRA, Docker, REST APIs, Apache, Selenium, Celery, RabbitMQ, GraphQL, Pytest, PyTorch
OS : Linux/UNIX, Windows

Experience

High-Speed Research Network Vertically Integrated Project (Student Researcher**), NYU**   February 2022-May 2023
- Successfully led and supervised a dynamic VIP team of 30 students, implementing agile methodologies for effective project management and facilitating outreach activities and interview processes for new candidates.
- Implemented seamless deployment of corelink clients through GitLab pipeline, ensuring automatic updates of client artifacts upon codebase modifications.
- Optimized developer productivity by integrating the client and server documentation API into the CI/CD pipeline, resulting in a remarkable time savings of over 50% for modifying the documentation.

Crest Data Systems (Summer Intern**), San Jose, CA**   June 2022-August 2022
- Created document view and download functionality in the HR Management System using ReactJS, saving over 100 Mb of storage space and streamlining HR manager's workflow.
- Reduced team directory page load time through intelligent result caching, resulting in a 30% efficiency boost.
- Fixed bugs related to employee designation modifications and displayed resigned managers' names in leave logs for improved data accuracy and transparency.

NH Infosoft(Apprenticeship**), Ahmedabad, India**   January 2021-June 2021
- Deployed an advertisement booking client-based application using React JS, JavaScript, Python, MongoDB and Google Cloud Platform (GCP).
- Designed a GCP (Google Cloud Platform) Cloud Function for automatic E-Mail and SMS-triggered service for event-driven actions.
- Created a customer feedback module to measure the satisfaction of the customer after implementing suggested changes which resulted in the growth of the customer retention rate.
- Increased and optimized the capacity of concurrent users and reliability of the application using a GCP load balancer by 44%.
- Increased online advertisement bookings by 40% which led to 25% growth in the company's revenue.

Projects

Effective Implementation of Stealthy Syntactical Backdoor Attack on Language Models
- Proposed a novel backdoor attack on Language Models, by integrating the poison data generation process with the pre-trained T5 model, resulting in a maximum ASR increase of 23% , among the tested model/dataset configurations.
- Implemented a backdoor defense, using GPT3, which counter-attacks the novel attack methodology, by bringing down the ASR by 50% , in almost all of the tested model/dataset configuration.

Blockchain based consensus protocol for fair transaction ordering
- Illustrated comparative study with 4 other relevant schemes and tabulated the results of related publications.
- In the proposed method, for 50% of dishonest nodes, an improvement of 70% was recorded against a fixed transaction.**Publication**-https://ieeexplore.ieee.org/document/9515090

Bit-torrent Client in Python
- Inspected a simple Unofficial BitTorrent Specification with a basic architecture that ran on the local network of the university with file transfer speeds of around 200 Mbps.

Covid-19 Tracker
- Developed a Covid-19 tracker app using React.Js, Open Source APIs (disease.sh), and Google Map APIs to track and analyze the current number of Covid cases, recovered people, and death worldwide
- Implemented a chart module for a better visual representation of data and an interaction module to interact with details.