VISHAL SATHYANARAYANA

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1500 East Broadway Rd, Tempe, Arizona, 85282

EDUCATION

Arizona State University, Tempe August 2022 - May 2024
Master of Science, Computer Science CGPA: **3.89/4.0**
Major Coursework: Foundations of Algorithms, Data Mining, Data Processing at Scale, Semantic Web Mining, Advanced OS, Integrated Robot Learning with HumanRobot Collaboration, Robot Perception, Artificial Intelligence

PES University, Bengaluru August 2017 - July 2021
Bachelor of Technology, Computer Science and Engineering CGPA: **9.44/10.00**
Major Coursework: Algorithms, Data Structures, Operating Systems, Database Management Systems, Distributed Systems, Big Data, Cloud Computing, Compiler Design, Data Analytics, Computer Networks

SKILLS

Programming Languages	Python, Java, JavaScript, HTML, C++, TypeScript
Frameworks	RESTful API, Reactjs, Spring Framework, Node.js, Angular, Map Reduce
Database & tools	MySQL, MongoDB, Postgres, Docker, Git, Kubernetes, AWS, JIRA
Certifications	Architecting with Google Compute Engine (Google), Machine Learning (Stanford)

PROFESSIONAL EXPERIENCE

Akamai Technologies Bengaluru, India
Designation: Software Engineer, ***Enterprise Applications*** *July 2021 - July 2022*

- Led the development of a high performance parallel infrastructure for the Akamai Marketplace, increasing the end-to-end performance by 10x
- Engineered an innovative Java workflow to efficiently parse, structure and evaluate over 8000 product rules in less than 2s
- Spearheaded the development and AWS cloud deployment of the Intake project, responsible for simplifying and automating the process of creating tickets on JIRA for 30+ business teams across the organization
- Optimized existing bulk API SQL queries by leveraging join and aggregate operations to efficiently run on the Oracle database
- Designed and developed bulk APIs using the Spring Framework to scale the end-to-end product trial and purchase flows for SSL Certificates on Akamai's marketplace

Akamai Technologies Bengaluru, India
Designation: Software Engineer Intern *January 2021 - June 2021, June 2020 - July 2020*

- Created a scalable Java pipeline for Akamai marketplace's existing product and orders API, optimizing performance by 30%
- Migrated and enhanced the legacy AngularJS codebase to Angular 11 using Redux, improving performance by **30%**
- Developed an end-to-end REST-based web application for internal users to validate critical business rules
- Bolstered the application with extensive error handling and dynamic product insertion provisions to provide a seamless user experience

ACADEMIC PROJECTS

MiniHIVE *Map Reduce, Java, Hadoop File System, SQL*

- Developed a SQL query engine similar to Meta's Hive by creating dynamic Java MapReduce jobs for efficient retrieval of data on the Hadoop Distributed File System (HDFS)
- Implemented runtime mapping of standard SQL queries to MapReduce jobs for processing large streams (order of TBs) of data present across multiple nodes in a scalable manner

Scalable CloudApp (DbaaS) *Python, Flask, Kubernetes, ZooKeeper, AWS, SQL*

- Devised an orchestrator service that delivers a fault-tolerant, highly-available database as a service on AWS cloud using REST APIs and Docker containers
- Enhanced the application with 3 EC2 instances, effective load balancing, microservices, and scale-in-scale-out capabilities for scalability and high availability

BlogSpot - Social Media Web App for Bloggers *JavaScript, Flask, REST APIs, TypeScript, Angular, Spring*

- Bootstrapped a Social Media website using Spring MVC, Angular and Flask REST APIs
- Implemented an infinte scroll feed with lazy loaded images and a robust search engine with submission throttling
- Enhanced the system with an RSS feed and integrated an unsupervised machine learning based recommendation system for user feeds
- Developed a full-duplex chat system to efficiently connect more than 20+ users in a scalable manner