SIDDHARTH GARGAVA

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LinkedIn | Website | Github | Availability: Summer 2024

EDUCATION

Northeastern University, Boston, MA   May 2024
Master of Science in Computer Software Engineering   Grade: **3.8/4.0**
Courses: Databases, Web Tools and Development, Networking and Cloud Computing, Data Structures and Algorithms

Delhi Technological University, Delhi, India   May 2019
Bachelor of Technology in Electrical and Electronics Engineering
Courses: Object Oriented Design, Operating Systems, Compiler Design, Artificial Intelligence, Server-Side Programming

TECHNICAL SKILLS

Languages: Java, Python, C++, Javascript, Node.JS, Go, Typescript, Kotlin, Scala, C#, Rust, C, Ruby, .NET
Frameworks: Spring, PySpark, Angular, React, jUnit, jQuery, Maven, Hibernate, Apache Spark, Jest, Swagger, Selenium
Tools: Kubernetes, Redis, ZooKeeper, Git, Linux, ElasticSearch, Terraform, Jenkins, Kafka, Grafana, Airflow
Web Technologies: AWS, Docker, Google Cloud, Azure, Django, Flask, Vue, Splunk, SignalFX, Fusion, CI/CD
Databases: MySQL, Postgres, MongoDB, Spark, GraphQL, NoSQL, Hadoop, DynamoDB, Cassandra

WORK EXPERIENCE

Hewlett Packard Enterprise, Andover, MA   (2023)
Software Engineer Intern
- Developed gRPC-based utility in Python, deployed via Docker, for HPE's cloud storage platform, featuring microservices for simulating network stress within Kubernetes cluster employing service-oriented architecture
- Integrated Linux Traffic Control package with the core services to programmatically modify networking conditions in kernel interfaces, supporting detailed scenarios like increased latency and packet loss to assess system resiliency
- Achieved 10% improvement in messaging efficiency within the pods and streamlined the deployment processes across the development pipeline

Deloitte Consulting, India   (2019-2022)
Software Engineer
1. Financial data migration framework
   - Created Java based data migration framework – FSCNow, aimed at saving deployment resources facilitating concurrent low-latency data transfer between two versions of the cloud application
   - Coded the Spring MVC architecture-based web application encompassing REST APIs in Java, ReactJS front-end, and MySQL for session management to improve onboarding efficiency by 25% of new product features
2. Blockchain development
   - Built 'Covid Donation Management' solution on NodeJS, based on decentralized distributed system incorporating Redis cache, solidity contracts and Go routines to establish employee donation apparatus raising USD 25,000
3. Backend scraping tool
   - Reduced pay processing time over 40% by building Java backend scraping tool to retrieve information from backend Callidus tables via REST APIs optimizing incentive validation models

Northeastern University, Boston   (2022-2023)
Assignment Management App (Stack: AWS, Javascript, PostgresQL, Typescript, MongoDB)
- Built cloud native application that enables students to manage assignments, comprising RESTful backend API services and utilizing AWS resources for a scalable and resilient hosting infrastructure
Internship Portal (Stack: Java, Spring Boot, MySQL, Hibernate)
- Crafted a backend Spring MVC guided portal that connects students with recruiters, streamlining the internship search process
Indexing Big Data (Stack: Javascript, ElasticSearch, Kafka, Redis, Apache Spark)
- Programmed distributed system for big data architecture, focusing on concurrent low-latency processing and real-time analytics of large health insurance dataset, to guarantee a maximum write latency of 50ms, ensuring efficient data ingestion and querying

PROJECTS

Smart Contract Synthesis with Conflict Driven Learning| C++, Java, GNU Compiler
- Engineered C++ based CONFRAN tool, equipped with constructing smart contracts within 300 sec at 96% accuracy, to conduct gcc compiled program synthesis research; Drafted paper under review at '18th ENASE Conference, 2023'
Logo Detection with Machine Learning| PyTorch, Tensorflow, Deep Learning, Python
- Designed Logo Detection algorithm with Tensorflow and PyTorch libraries to improve Sony TV channel engagement by identifying key logos on screen using Single Shot Detector (SSD) method to detecting localized objects in images

ACHIEVEMENTS AND LEADERSHIP SKILLS

- Winner of EthBoston'23 Hackathon
- Teaching Assistant at Northeastern University instructing students on consensus mechanisms, agile methodology, and Rust