SAI NITHESH VARMA RUDRAVARAM

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PROFILE SUMMARY

I am a skilled Full Stack Java Developer with professional experience and a master's degree from USF, Tampa with specializing in IT Management and System Engineering. Skilled in Java, Python, SQL, AWS and building RESTful APIs, optimizing SQL queries, and implementing secure cloud-native web service solutions with AWS (EC2, S3, SQS, Lambda). Certified AWS Developer Associate with expertise in cloud optimization, workflow automation, and system performance enhancements. Proven success at Tata Consultancy Services, USF, and IIT Madras with learning new technologies and improved efficiency in collaboration and delivering impactful software solutions using Agile methodologies.

EXPERIENCE

Lead Java Developer July 2024 - Current

SRI Tech Solutions, Client – Southwest Airlines | Dallas, TX

- Designed, developed, and maintained robust Java-based applications using **Spring Boot and REST APIs**, ensuring efficient data processing and seamless integration between distributed systems.
- Continuously monitored system environments, proactively identifying performance bottlenecks, security vulnerabilities, and system inefficiencies, implementing timely resolutions to prevent downtime.
- Investigated and troubleshot complex software bugs, optimizing application performance through thorough code analysis, refactoring, and implementing best practices for memory management and multithreading.
- Worked extensively with AWS cloud services, including Kinesis for real-time data streaming, Glue for ETL processes,
 Athena for query execution on large datasets, and Secrets Manager for secure credential management.
- Leveraged containerization technologies such as **Docker and Kubernetes** to create scalable, resilient applications, utilizing **EC2 Container Services** for efficient deployment and orchestration of microservices.
- Led deployment strategies, coordinating feature enhancements and version releases for high-impact applications, ensuring continuous improvements and minimal disruption to production environments.
- Designed and implemented **CI/CD** pipelines using **Git, Jenkins, and Maven** to automate build, test, and deployment processes, reducing manual effort and accelerating release cycles.

Graduate Research and Teaching Assistant

Aug 2023 - Dec 2024

University of South Florida | Tampa, FL

- Developed a classification model with scikit-learn, achieving 86.75% accuracy and 91.87% precision.
- Built an ETL pipeline using **AWS Glue**, **PySpark**, **S3**, and **Lambda** to automatically identify and merge CSV files, reducing manual intervention by 80%, enhancing scalability, and streamlining data integration processes.

Back-End Java Developer Oct 2020 - Feb 2023

Tata Consultancy Service, Client – DTCC, USA | India

- Designed, developed, and maintained over 50 RESTful APIs using Java (8,11+) and Spring Boot.
- Led the optimization of database queries in PostgreSQL and Snowflake, reducing query execution times by 30% and improving overall API response times to under 300ms.
- Applied multithreading techniques in performance-critical components, ensuring high performance and concurrent task execution.
- Improved code quality and performance by implementing design patterns like Singleton, Factory, and Dependency Injection, reducing technical debt by 20%.
- Managed and monitored application logs using Splunk and AWS CloudWatch, proactively identifying and resolving production issues.
- Developed and maintained **NoSQL databases such as DynamoDB and MongoDB** along with relational databases including MySQL, Oracle, and RDS.
- Integrated streaming technologies such as Apache Flink, Apache Storm, and Spark for real-time data processing.
- Automated infrastructure provisioning with Terraform, reducing deployment times by 40% and optimizing cloud resource management on AWS.

Java Engineer Mar 2019 - Sept 2020

IIT Madras Research Park | India

• Developed software design patterns and maintained a web application using the Spring Boot framework, improving efficiency by 60% while implementing RESTful APIs for seamless integration.

- Conducted unit testing with JUnit and Mockito, achieving 96% overall code coverage, and optimized the application's performance by enhancing database queries and implementing caching.
- Mentored junior developers on best practices in Java, Spring Boot, and SQL optimization, fostering team skill development and increasing productivity.

EDUCATION

University of South Florida, Tampa | GPA: 3.84 / 4.00

Dec 2024

Master of Science, Engineering Management in Information Technology Management & System Engineering Relevant Course Work: Data Systems, Applied Data Intelligence, Data Science, MLOps, DBMS, Cloud Computing, FinTech.

Amrita Vishwa Vidyapeetham, India | GPA: 3.30 / 4.00

Jun 2020

Bachelor of Technology

SKILLS & COMPETENCIES

Programming Languages: Java (8+), J2EE, JVM, Python, HTML, CSS, JavaScript, PySpark, PL/SQL, R, AI,

Golang, Node.js, or TypeScript.

Frameworks & Tools:
 Spring Boot, Jenkins, Bitbucket, Apache Spark, GIT, Hibernate, Terraform,

Maven.

Databases: PostgreSQL, Snowflake, MariaDB, DynamoDB, RDS.

Cloud Technologies: AWS (S3, Lambda, Glue, SQS, SageMaker).

Methodologies: Agile(Scrum), Continuous Improvement/Continuous Deployment, Unit Testing.

CERTIFICATIONS AND PUBLICATIONS

AWS Certified - Cloud Practitioner (AWS CCP).
 AWS Certified - Developer Associate (AWS DVA).

Published research paper on "IoT Smart Systems" in IJEET Journal in Scopus Conference. (IJEET Journal).

• Certified in Information Technology Management and Systems Engineering by USF, Tampa.

KEY PROJECTS

AWS S3 File Analysis Using Spring Boot (Intern)

Jul 2024 - Sept 2024

- Developed a Spring Boot application enabling secure file uploads, downloads, and management via a REST API, integrated seamlessly with AWS S3 for storage.
- Designed APIs to retrieve datasets from AWS S3, execute machine learning models, and deliver actionable insights, enhancing analytics and decision-making processes.

Automated S3 File Merging and Data Integration Using AWS Glue (Intern)

Oct 2024 - Dec 2024

- Developed a scalable ETL pipeline to dynamically identify and merge files from Amazon S3 based on shared attributes, leveraging AWS Glue, AWS SQS, AWS Lambda, DynamoDB for efficient data processing.
- Implemented seamless integration and storage of merged files in S3 which reduced manual intervention by 80%.

Research Case Study on Moffit Cancer Dataset (Research Project)

Aug 2023 - Dec 2023

- Built an NLP model using scikit-learn, reducing FN to 10.54% and improving Disease-X detection accuracy to 88%.
- Optimized model performance with hyperparameter tuning and feature engineering, enhancing robustness and achieving high precision in Disease-X detection.
- Delivered a reliable predictive solution, showcasing machine learning's potential in healthcare analytics and improving disease management and decision-making.