

VARUN MEDIDA

SOFTWARE ENGINEER

Location: GA | **Phone:** 470-452-3400 | **Email:** varuns435@outlook.com | **Linkedin:** <http://www.linkedin.com/in/varun-medida/>

SUMMARY

- Software Enthusiast with over 5 years of experience, adept in **Java**, **Python**, and **SQL** to build efficient and scalable applications tailored to meet business requirements.
- Proficient Database Manager with expertise in **MySQL**, **PostgreSQL**, **MongoDB**, and **Oracle**, skilled in optimizing data storage and retrieval to support complex operations.
- Experienced Back-End Developer, adept at developing secure, efficient applications using **Java (Spring Boot, Spring Core)**, **Python (Django)**, ensuring high reliability and seamless integration with front-end systems.
- Skilled in leveraging **AWS** services like **EC2**, **S3**, **Lambda**, **CloudWatch**, **RDS**, and **Glue** to design scalable, reliable cloud architectures that improve system performance. **Cloud Expertise: DynamoDB, Lambda, Step Functions, EventBridge, CloudFormation, API Gateway.**
- **Proficient in Software Frameworks** such as **Spring Boot** for enterprise applications, **Angular** for single-page applications, and **Hibernate** for ORM, promoting modular and efficient designs.
- Well-versed in **SDLC**, **Agile**, and **Waterfall** methodologies to guide project lifecycles, ensuring adherence to deadlines and specifications.
- Thorough Testing Skills, utilizing Selenium for web automation, Postman for API validation, and JUnit for unit tests to ensure component reliability across various scenarios.
- Skilled in Version Control, using **Git** and **GitHub** to manage code versions, collaborate with team members, and prevent data loss.
- Skilled in JVM profiling, GC tuning, performance optimization, and scalability planning for high-load applications.
- Experienced in load & stress testing (JMeter, LoadRunner), API benchmarking, and capacity estimation to enhance system resilience and responsiveness.

PROFESSIONAL EXPERIENCE

Storee Construction

AWS Java Developer

Springfield, Missouri, USA

October 2024 – December 2024

- Developed a construction site management dashboard for delivery, procurement, and accounting using AWS, Java (Spring Boot), and React. Implemented AWS CloudWatch and X-Ray monitoring, optimizing performance and debugging issues efficiently.
- Designed AWS Lambda functions for event-driven data processing, improving real-time procurement tracking.
- Integrated AWS S3 for secure file storage and DynamoDB for transaction logs, ensuring data persistence.
- Configured AWS API Gateway for routing API requests and IAM policies for secure service communication.

Georgia State College of Law

Software Developer - Data

Atlanta, Georgia, USA

January 2023 - March 2024

- Developed automated data collection workflows using Python's Pandas library and custom scripts, reducing processing time by 70% and enabling accurate, on-demand data retrieval to support faster, data-driven decision-making.
- Built dynamic data visualizations with Matplotlib to illustrate trends in complex datasets, increasing data accessibility for stakeholders by 30% and enabling informed decision-making in research projects.
- Engineered optimized data algorithms for structuring large datasets, applying microservices architecture to handle distributed data, resulting in a 20% boost in accessibility and 25% faster data processing.
- **Orchestrated** Agile framework processes, aligning deliverables with project objectives, enabling continuous feedback loops, driving iterative improvements, ensuring alignment with stakeholder requirements, and sustaining momentum throughout the project lifecycle.

Epam Systems

Software Engineer

Hyderabad, India

January 2020 - December 2022

- Automated master data creation using **AWS Glue** Jobs, improving data processing efficiency by 40%.
- Configured **DynamoDB Streams** + **SQS** for real-time data updates in downstream services.
- Automated AWS cost optimization strategies, including EBS volume tuning, EC2 scaling, and Compute Savings Plans.
- Implemented S3 Signed URLs, enabling secure file uploads and EC2-based processing.
- Configured AWS CloudWatch to monitor key performance metrics (CPU usage, response time) and set up alerting protocols, resulting in a 25% reduction in system downtime and improved user experience.
- Automated cloud infrastructure provisioning with Terraform and Infrastructure as code, enhancing platform scalability and reliability by 15% to handle high traffic demands within a microservices environment.
- Built secure RESTful APIs for CARMA project using JWT authentication and HTTPS, facilitating efficient data exchange and increasing system stability across integrated business functions by 20%.
- Designed and implemented **Kafka**-based pipelines to process real-time streaming data, improving system scalability and enabling faster decision-making.
- Integrated **S3 Event Notifications with Lambda & SNS** to trigger real-time processing when new files were uploaded.
- Investigated slow database queries using EXPLAIN ANALYZE, reducing query execution time by 60%. Debugged high CPU utilization issues by analyzing thread dumps & GC logs.
- Implemented Spring Security with AES encryption and HTTPS, achieving 100% compliance with data protection standards and safeguarding user data confidentiality across platforms.
- Automated performance monitoring alerts using CloudWatch, Prometheus, and Grafana, reducing incident response time by 25%.

Tata Consultancy Services

Associate Systems Engineer

Hyderabad, India

January 2019 - December 2019

- Configured CI/CD pipelines with Jenkins, Docker, and Kubernetes, reducing deployment time by 30%. Configured **AWS Step Functions & EventBridge** to trigger Glue Jobs dynamically based on incoming data events.
- Designed PostgreSQL databases, ensuring data integrity, performance, security for inventory data, implementing schema design and indexing to support scalable, high-performance applications, optimizing data handling and reliable data storage.
- Built responsive interfaces with Angular, following web development best practices and accessibility standards, improving user satisfaction by 20% through streamlined interface functionality, enhanced design, and user-centric component integration.
- Steered Agile ceremonies (sprint planning, stand-ups, retrospectives) to synchronize project tasks with objectives, ensuring consistent feature delivery, fostering collaboration, and incorporating feedback to drive iterative, impactful enhancements.
- Utilized GitHub for version control, managing repositories, implementing branching, enabling collaborative development with structured pull requests and code review, supporting efficient workflows, and maintaining code integrity and organization.

Spyry

Intern

Bangalore, India

March 2018 - May 2018

- Conducted vulnerability assessments using design patterns in secure coding to minimize risks, strengthening system robustness by 40%.
- Performed penetration testing with Kali Linux, Burp Suite, providing actionable insights to address vulnerabilities, supporting proactive measures that fortified application defenses against potential threats and ensured system stability and safety.
- Collaborated with senior engineers to implement best practices, contributing to remediation of identified vulnerabilities, improving system security through defined protocols, enhancing data protection, and following industry standards effectively.
- Documented findings in detailed reports, ensuring clear, concise communication of security issues and resolution steps, facilitating team collaboration, promoting cybersecurity awareness, and establishing a proactive approach to security.

TECHNICAL SKILLS

Programming Languages:	Java, Python, SQL, PHP, C++, C#, HTML, JavaScript, TypeScript, JQL
Databases:	MySQL, PostgreSQL, MongoDB, Oracle, MS SQL Server, AWS RDS, PostGis
Web Technologies:	HTML, CSS, JavaScript, Bootstrap, XML, jQuery, React, Node, Express, Angular, Java (Spring Boot, Spring Core), Python (Django), Node.js, .NET, Leaflet
Cloud Technologies:	AWS (EC2, S3, Lambda, RDS, CloudWatch, Glue, IAM, VPC, CloudFormation, DynamoDB, API Gateway), Azure, Google Cloud Platform (GCP)
Frameworks:	Spring Boot, Spring Core, Hibernate, Angular, React, Playwright, Selenium, Dagger, jQuery, Bootstrap, Node.js, Express.js, Mockito, Junit, FastAPI, JMeter, LoadRunner, JProfiler, Grafana
DevOps & CI/CD:	Git, GitHub, Jenkins, Terraform, Docker, Kubernetes
Data Streaming:	Apache Kafka, SQS,
Performance Engineering:	JVM Profiling, Garbage Collection Analysis, API Benchmarking, Load & Stress Testing, Prometheus
Methodologies:	Agile, Scrum, Waterfall, Software Development Life Cycle (SDLC),
Testing Tools:	Selenium, Playwright, Postman, JUnit, API Testing
Version Control Tools:	Git, GitHub
IDE'S:	Visual Studio Code, IntelliJ, Eclipse

EDUCATION

Georgia State University

Masters in Computer Science

Anurag Group of Institutions

Bachelors in Information Technology

Atlanta, Georgia, USA

December 2024

Hyderabad, India

August 2019

PROJECTS

1. Disaster Data Management System

Developed a full-stack application to automate disaster data retrieval, processing, and visualization from the EM-DAT database. Integrated a React front-end with input fields for year range selection, a Spring Boot back-end for Playwright-based data extraction, and a Python script for data processing. Leveraged PostgreSQL for data storage, ensuring scalable and efficient management of disaster records, with asynchronous processing to enhance user experience. Addressed challenges in file handling and database constraints, delivering a robust, automated data solution. Used Leaflet and PostGIS for mapping the Geospatial Data

2. eCommerce Website

Built an eCommerce platform during training at EPAM Systems, using Java Spring Boot for the back end and Angular for the front-end. Enabled features for customers to shop for products, view items in a cart, and modify selections, creating an intuitive user experience. Integrated Selenium and Playwright for automated functional and end-to-end testing, achieving 95% test coverage and ensuring reliable cross-browser performance.

3. Travel Amigo

Oversaw the development of a React Native mobile app for travel planning, receiving feedback from over 200 students and achieving a 4.5-star user satisfaction rating. Integrated features for user authentication, dynamic trip management, and weather forecasting, driving a 30% increase in user registrations and a 20% improvement in retention. Collaborated closely with the development team to meet project goals, fostering a user-friendly and engaging application.