SUNDERAMURTHY YUVARAJ

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PROFESSIONAL EXPERIENCE

Tata Consultancy Services | Chennai, India

Java Middleware Engineer, Bank of America(Java, Spring, JPA, IBM MQ, Apache Camel, Splunk)   **Jun 2020 - Jul 2022**
- Enhanced the bank's product(Loan Services) relationship APIs by implementing three major flows for managing loan linkages, providing a comprehensive financial overview for small & medium businesses
  - Redesigned XML requests/responses, refactored custom Orika mappers, updated DTO/VO classes matching payload
  - Enhanced validation classes and implemented business logic to provide link unlink and retrieval of loan services
- Collaborated with the batch team to rectify 100k+ data mismatches and designed a daily verification report for validation
- Worked with teams to generate test-data and crafted test suite with 80+ cases, testing complete business flow
- Led the initiative to incorporate unit tests (JUnit & Mockito) into APIs, reducing testing time by 45%
- Onboarded 6 new channels to consent API bridging upstream services to store customer data through DML insertions
- Engaged in code reviews, volunteered for dark/flip deployments, and contributed to documenting design changes

ETL Developer/Support, Visteon Corporation   **Dec 2018 - Jun 2020**
- Spearheaded architecture/design of web application, empowering 70k+ clients to effortlessly generate BOM report, delivered to user via email using Information Builders, WebFocus, JS, Shell Script
- Achieved a 93% runtime reduction (3hrs to 12mins) by optimizing Qlikview script load time with the delta reload algorithm
- Performed script migration, server upgrade, bug fixes, and resolved 2 recurring production issues with 100% SLA

EDUCATION

Stevens Institute of Technology | Hoboken, NJ   **May 2024**
Master of Science in Computer Science   CGPA 3.9
Anna University | India, Chennai   **April 2018**
Bachelor of Engineering, Mechanical Engineering

SKILLS & CERTIFICATION

Programming Languages: Java, JavaScript, Python, C++, C#, HTML, CSS
Java Frameworks: Collections, Spring/Spring Boot, JPA, JAX-RS, Gson, gRPC, Apache Camel, Junit, Mockito, Log4j, Spark
JavaScript Frameworks: Node.js, React.js, Express.js, Handlebars **Python Frameworks:** FastAPI, SQLAlchemy, Pydantic
Databases: PostgreSQL, MySQL, IBM DB2, MongoDB
Cloud & Container Technologies: AWS, GCS, Docker, Kuburnetes
Tools: Maven, Git, Splunk, Jenkins, Ansible, SonarQube, Putty, Jira
Certifications: AWS Solutions Architect Associate -Udemy, Machine Learning -Stanford University

ACADEMIC PROJECTS

TimeWise Web Application(Spring Boot, Spring Security, JWT, Spring Cloud, React, GCP, Postgres)   **GitHub**
- Architected/Developed modular backend services—Application, Security, and Gateway—using Spring Boot, Spring Security, JWT, and Spring Cloud, achieving scalability using containerization and cloud deployment techniques
- Modernized the frontend to a react based solution, incorporating async queries and react hooks for improved performance

Distributed Hash Table(Java, gRPC, Maven, EC2)   **GitHub**
- Modeled a high-performance distributed key/value store utilizing the CHORD peer-to-peer lookup protocol, optimized for large-scale distributed storage with gRPC stubs, featuring logarithmic lookup

Hospital Registry Service(Java, Jakarta EE, Gson, PostgreSQL, Docker, Kuburnetes, AWS)   **GitHub**
- Implemented a HATEOAS-driven cloud-native hospital registry service with health checks using J2EE and MicroProfile
- Deployed API on AWS with a Kubernetes cluster using EC2, ECR(Container Registry) & EKS(Elastic Kubernetes Service)

1 Billion Row Challenge(Java, NIO, Concurrency)   **GitHub**
- Engineered a high-performance SIMD (Single Instruction, Multiple Data) solution by leveraging Java Threads and the Memory Map API (NIO module) for faster I/O operations, achieving a 90% reduction in runtime from 250 ms to 24 ms

Android Chat Application(Java, Room, SQLite, Android Studio)   **GitHub**
- Developed a messaging app on android with registration and chat interface using Activities, Fragments and ViewModels
- Leveraged worker manager to effectively upload and download messages from app server, enabling real-time communication