

SATYA SAI PRAVEEN ANDRA

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Education

Indiana University Bloomington

Master of Science in Computer Science

Bloomington, IN

August 2023 – May 2025

Andhra University

Bachelors of Technology in Electronics & Communication

Visakhapatnam, India

August 2017 – May 2021

Experience

Software Engineer I

September 2021 – July 2023

Ford Motor Private Limited

Chennai, India

- Maintained 10 microservices for an automobile e-commerce platform, adding new business logic and enhancing pricing and tax calculations using **Java**, **Spring Boot**, **PostgreSQL**, and **REST APIs**.
- Contributed to the development of a SPA vehicle finance calculator using **Angular** and **Material UI**, enabling users to generate real-time financing quotations and serving 60,000+ monthly views.
- Managed **CI/CD** pipelines in Jenkins, implementing **TDD** with **JUnit** and Mockito while overseeing security scans (SonarQube, FOSSA, Checkmarx) and resolving vulnerabilities.
- Worked on a PoC by prototyping the migration on one service, streamlining the process for 10 back-end and 5 front-end services from PCF to **GCP**, and providing migration guidelines to the team for efficient execution.
- Played a key role in transitioning CI/CD from **Jenkins** to **Tekton**, leveraging **Terraform** for infrastructure provisioning and adopting **Docker**-based deployments with **Kubernetes** and Google Container Registry for streamlined rollouts.
- Replaced inefficient batch jobs and cron-based data loading with an event-driven architecture using Apache **Kafka** and Google Pub/Sub, reducing redundant compute and I/O operations while ensuring timely data updates.

Software Development Intern

March 2021 – August 2021

Smart Bridge

Visakhapatnam, India

- Assisted in developing scalable web applications using **React**, **TypeScript**, and **TailwindCSS**, enhancing user engagement through interactive UI components while collaborating with UX designers and backend teams.
- Involved in designing and optimizing microservices with Node.js and Express, improving API efficiency, load balancing, and database performance to enhance scalability by 35%.
- Participated in Scrum and Agile ceremonies, ensuring smooth development cycles and collaboration within the SDLC. Applied design patterns to enhance code maintainability and software delivery.

Technical Skills

Programming Languages: Java, Python, C, C++, JavaScript, TypeScript, SQL, HTML/CSS

Frameworks & Libraries: Angular, React, Node.js, Next.js, React Native, Express.js, Django, GraphQL

Developer Tools & DevOps: Git(Version Control), Docker, Jenkins, Tekton, Splunk

Cloud Platforms: AWS (EC2, RDS, S3, CloudWatch, Secrets Manager), Google Cloud Platform

Databases: PostgreSQL, MS SQL, Oracle SQL, MySQL, MongoDB(NoSQL)

Core Competencies: Web Development, RESTful APIs, Object-Oriented Programming, Data Structures and Algorithms, Database Management, System Design, Software Development Life Cycle, Debugging

Projects

Rent It All (Rental Services) | *Express.js, React, PostgreSQL, Node.js, Docker*

- Developed a full-stack web application using the PERN stack (PostgreSQL, Express.js, React, Node.js), enhancing scalability, optimizing system efficiency, and implementing secure JWT authentication.
- Containerized the application using Docker, boosting deployment efficiency by 50%, and integrated real-time messaging, email notifications, and a ticket system for enhanced user communication.

Quick Ticket (Ticket Booking) | *Spring Boot, Java, Gradle, SQL, Git*

- Delivered a scalable back-end system for Quick Ticket using **Java**, **Spring Boot**, and **REST APIs**, implementing efficient CRUD operations to facilitate reliable data management.
- Secured sessions with JWT authentication and optimized SQL, cutting response time by 25%.

Cloud-Native Java Application Deployment with DevOps Automation | *AWS, Terraform, Ansible*

- Enabled high availability and accelerated application rollouts by 30% for a cloud-native Java application through a well-architected CI/CD pipeline on AWS, using Terraform to provision necessary cloud infrastructure.
- Maintained 99.9% uptime by integrating AWS Secrets Manager and CloudWatch for secure and efficient monitoring, which led to faster detection and resolution of issues.

Certifications

AWS Certified Developer – Associate, Amazon Web Services (AWS)