# Pranaya Vangala

**Java Full Stack Engineer**

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## Summary


**Java Full-Stack Engineer with 5+ years of experience** in designing and deploying scalable web applications. Proficient in Java, Python, JavaScript, React.js, Spring Boot, and Node.js. Expertise in microservices architecture, AWS, Docker, Kubernetes, CI/CD pipelines, and distributed systems. Skilled in database optimization (MySQL, MongoDB), automated testing frameworks (JUnit, Mockito), and Agile methodologies. Adept at delivering high-performance, secure, and scalable solutions while enhancing development workflows.


## Education

**Master Of Science in Data Science** **Jan 2023 - Dec 2024**
Jawaharlal Nehru Technological University, India

**Bachelor of Technology in Computer Science and Engineering** **Jul 2017 - May 2021**
Jawaharlal Nehru Technological University, India

## Skills

- **Programming Languages:** Java, Python, JavaScript, SQL
- **Front-End Development:** React.js, HTML5, CSS3, JavaScript (ES6+)
- **Back-End Development:** Spring Boot, Node.js, Express.js, RESTful APIs
- **Cloud & DevOps:** AWS (EC2, S3, RDS, Lambda), Docker, Kubernetes, Git, Jenkins, Terraform
- **Database Management:** MySQL, PostgreSQL, MongoDB
- **Testing & QA:** JUnit, Mockito, Jest, Selenium, Cucumber, Postman, JMeter
- **Tools & Methodologies:** GitHub, Maven, CircleCI, CI/CD, Agile (JIRA, Trello)

## Experience

**Cargill, USA** **Sep 2023 - Current**
**Software Development Engineer**

- Designed and implemented end-to-end microservices architecture using Spring Boot and RESTful APIs, ensuring scalability and modularity for core business functionalities.
- Improved deployment efficiency by streamlining CI/CD pipelines using Jenkins, integrating automated testing frameworks like JUnit and Mockito.
- Automated cloud infrastructure provisioning with Terraform, deploying AWS resources such as EC2, S3, and RDS, reducing manual intervention.
- Configured AWS CloudWatch for real-time monitoring and alerting, cutting incident resolution time.
- Developed dynamic user interfaces with React.js and Redux, enhancing frontend performance and reducing client-side latency and Secured API integrations using OAuth2 and implemented encryption protocols.
- Conducted performance tuning of backend processes and MySQL queries, achieving a reduction in query execution times.
- Collaborated cross-functionally to ensure seamless integration between frontend and backend components, delivering the project within timelines and with zero critical bugs.

**TCS,India** **Sep 2021 - Aug 2023**
**Application Developer**

- Developed 20+ reusable UI components with React Native, Node.js, and TypeScript, leveraging custom hooks and ES6+ features, reducing development time by 30% and improving code efficiency by 25%.
- Deployed applications using AWS S3, RDS, and DynamoDB, implementing fault-tolerant architectures, increasing scalability by 35%, and reducing downtime by 40%.
- Improved API performance with Redux-Saga, enhancing state management and middleware processing, achieving a 99% API success rate and reducing response times by 20%.
- Applied Test-Driven Development (TDD) with Jest and Mocha, achieving 20% fewer bugs in production and ensuring long-term code reliability.
- Optimized frontend load times by 25% using lazy loading, code splitting, and tree shaking, reducing bundle sizes by 20% for improved performance.
- Secured APIs using JWT authentication, OAuth2, and HMAC encryption, ensuring compliance with OWASP standards and reducing unauthorized access incidents by 15%.
- Conducted system profiling with Chrome DevTools and Postman, optimizing middleware latency by 10% and reducing SQL query execution times by 15%.
- Automated CI/CD pipelines with Jenkins and GitHub Actions, integrating SonarQube for static code analysis and Docker for containerized deployments, cutting deployment times by 20%.

**Medisys Edu Tech pvt ltd, India** **Jan 2019 – Aug 2021**
**Software Engineer**

- Developed a secure online banking platform using Spring Boot and React.js, achieving a 95% reduction in unauthorized access incidents with Role-Based Access Control (RBAC) and JWT-based authentication.
- Optimized API response times by 30% by designing and implementing RESTful APIs using Spring Boot and integrating Swagger for documentation and testing.
- Integrated the bank's core banking system through secure REST APIs, improving real-time transaction processing speed by 40% and enhancing customer satisfaction.
- Enhanced database query performance by 25% through optimized indexing, use of Hibernate caching, and stored procedures in MySQL hosted on AWS RDS.
- Built and deployed a containerized microservices architecture using Docker and implemented CI/CD pipelines with Jenkins, reducing deployment time by 40%.
- Improved application availability to 99.99% uptime by leveraging AWS EC2, S3, and CloudWatch for hosting, monitoring, and scaling the application.
- Implemented advanced security measures such as AES-256 encryption, SSL/TLS protocols, and regular vulnerability scanning using Nessus, ensuring compliance with ISO 27001 and PCI DSS standards.