Shanmukha Rao Pandranki

✉ shanmukmichael@gmail.com | 📞 +91 94904 63466 | github.com/theshanmuk | in linkedin.com/in/theshanmuk

Professional Summary

Accomplished Full Stack Developer with 2+ years of experience building scalable, high-performance web applications. Skilled in designing and delivering robust solutions leveraging ReactJS, Spring Boot, and microservices architecture, with proven expertise in API optimization, application security, and performance tuning.

Skills

Languages: Java, Python, JavaScript (ES6+), SQL
Frontend: ReactJS, Redux, HTML5, CSS3, Material-UI
Backend: Spring Boot, NodeJS, Flask, Django
Platforms & Tools: Git, SVN, Linux, PostgreSQL, MongoDB, AWS, Docker, Jira, Postman, Burp Suite, Figma, VS Code

Work Experience

Project Engineer | **Bharat Electronics Limited (BEL), Bangalore**   Dec 2022 – Present

Geo Information and Communication System

- Designed and developed an automated real-time location-sharing system, enabling seamless vehicle tracking and improving operational efficiency by **40%**. Introduced a dynamic mission configuration module, enabling administrators to customize tracking frequency, and alert settings significantly enhancing flexibility and operational control.
- Implemented a scalable multi-user chat interface UI with efficient scroll-based message loading and list virtualization, reducing initial load time by **60%** and DOM memory usage by **50%**, ensuring smooth rendering of large datasets.
- Optimized API handling through intelligent caching, background updates, and performance tuning of endpoints, reducing redundant requests and improving response times for uninterrupted mission-critical communication.
- Strengthened application security by enforcing HTTPS and addressing OWASP Top 10 vulnerabilities. Built secure authentication and authorization frameworks for robust access control.
- Resolved **10+** critical VAPT issues and **15+** high-priority bugs by following security best practices, significantly enhancing application security and system resilience.
- Contributed to code reviews and technical discussions, and preparation of SRD, SDD documentation, and user manuals, improving code quality through the adoption of best practices, refactoring strategies, and performance optimization.
- *ReactJS, Spring Boot, JWT, OAuth2, Spring Security, React Query, Material-UI, React Virtualization, Jira, SVN*

Operation Theatre Management System

- Delivered **20+** high-performance RESTful APIs in a microservices architecture, enhancing data processing and retrieval efficiency, and reducing API response time by **20%** through query optimization and structured data handling.
- Designed and implemented a dynamic slot scheduling system, increasing hospital resource utilization by **40%**. Delivered an intuitive UI for seamless appointment booking and real-time patient scheduling.
- Engineered and optimized a scalable, normalized database schema to ensure data integrity, efficient indexing, and structured record retrieval for physicians, patients, and inventory management, adhering to ACID compliance.
- *ReactJS, Spring Boot, JPA, DTOs, PostgreSQL, Redux Toolkit, Middleware, React MUI, Git*

Support Engineer Intern | **Amazon, Chennai**   Jan 2022 – Jun 2022

- Developed **5+** AWS Lambda functions integrated with SQS for automated event-driven processing and asynchronous workflow optimization. Resolved **10+** JIRA tickets for Kindle OS UI components, enhancing interface responsiveness.
- *Lambda, SQS, DynamoDB, API Gateway, S3 Bucket, Spring Boot, React, Java, Python, Jira*

Education

Vignan Institute of Information Technology, Visakhapatnam   Jul 2018 – Jun 2024
B.Tech in Information Technology   *CGPA: 8.55/10*

Project Work

- **Graphical Password Authentication System (2020):** Developed a secure login mechanism using dynamic image randomization and position-based selection to prevent shoulder surfing attacks. *(Flask, HTML5, CSS3)*
- **Crime Prediction Model (2022):** Implemented a crime forecasting model using decision tree algorithms with 90% accuracy, enabling law enforcement to take proactive measures. *(Python, Pandas, NumPy, Matplotlib, Seaborn)*
- **Keylogger Application (2022):** Engineered a monitoring tool to record keystrokes, track active applications and services, capture screenshots, and automatically send reports to a designated email at custom intervals. *(Python, Tkinter)*