+91-9597252955 | mathankumar.mkk29@gmail.com | LinkedIn | GitHub | Leetcode

Software Engineer

PROFESSIONAL EXPERIENCE

Software Engineer, Nielsen

Bengaluru, KA; Dec 2024 - Present

Global Applications AdIntel-Portfolio | C#, ASP.NET Core, ReactJS, Javascript, Typescript, MySQL

- Designed scalable, modular C# Web APIs to power global AdIntel dashboards with real-time backend sync, improving reliability of capital markets data.
- Resolved critical XML import inconsistencies using advanced T-SQL debugging, enhancing data integrity across legacy systems.
- Collaborated with cross-functional teams to deliver site-detail enhancements that empowered media toggling and increased UI responsiveness.
- Implemented AWS-based backup and disaster recovery strategy for a key application, setting up multiple EC2 servers and maintaining real-time synchronization between production and backup environments.

Software Engineer, Tata Consultancy Services

Bengaluru, KA; May 2022 - Oct 2024

Lloyds Banking | JavaScript, React.js, TypeScript, Mui, Jenkins, microservices.

- Contributed to Lloyds Banking application modernization by migrating legacy JavaScript to TypeScript, optimizing structure and maintainability in line with Agile practices.
- Supported **CI/CD** integration using Jenkins pipelines and collaborated with cross-functional teams including QAs, Product Owners, and US-based developers.
- Built **Higher-Order Components (HOCs)** to reuse logic across interfaces, reducing code duplication by 40% and improving maintainability in a **TDD-first** setup.
- Developed accessible components compatible with **NVDA and JAWS**, aligned with WCAG guidelines, supporting inclusive experiences for retail and business users.
- Introduced robust session ID validation middleware in React, enhancing production stability and improving error handling with toast feedback and async refactoring.

TECHNICAL SKILLS

- Languages & Frameworks: Java, C#, JavaScript (ES6), TypeScript, React.js, ASP.NET Core, Node.js, Redux, Jest, Express.js, Next.js
- Architecture & Tools: Microservices, REST APIs, Jenkins, SonarQube, Git, MVC, TDD, SDLC, S.O.L.I.D, WebSockets, Toastify.
- Cloud & DevOps: AWS (EC2, S3), Google Cloud (QwikLabs), Jenkins, CI/CD pipelines
- Databases & Messaging: MySQL, PostgreSQL, MongoDB, SQLite, Redis, Kafka (learning).
- Concepts & Practices: MVC, Software Design, Application Resiliency, WCAG, Prompt Engineering, Accessibility (JAWS/NVDA).

LEADERSHIP IMPACT

- Mentored junior developers in backend issue diagnosis, helping them identify bottlenecks and resolve root-level service failures.
- Led code review sessions and technical walkthroughs to instill best practices in debugging, modular design, and observability.

PERSONAL PROJECTS

SMS Rate Limiter | Express.js, Node.js, SqLite, ReactJs, Tailwind CSS

Oct 2024, <u>Link</u>

Developed a rate-limiting middleware in Express.js using Sequelize and SQLite to enforce per-minute and daily SMS API limits based on IP and phone number. Built a responsive React.js dashboard with Tailwind CSS featuring real-time toast notifications and interactive charts to monitor request trends and system usage.

EDUCATION

Bannari Amman Institute of Technology, Anna University Bachelor of Engineering in Computer Science | GPA: 8.7/10 Erode, TN

CERTIFICATIONS

- Google Cloud Fundamentals (QwikLabs): Core Services, Compute Engine, Load Balancing
- Cutshort React.js Certification: Advanced Hooks, Routing, Redux
- HackerRank Certified: Problem Solving, Software Engineering, SQL, REST APIs