

Titty Mareena George

Senior Full Stack Developer | Node.js • TypeScript • React/Next.js • AWS • PostgreSQL
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Professional Summary

Senior Full Stack Developer with 5+ years of experience architecting and deploying scalable web platforms using Node.js, TypeScript, and React/Next.js. Proven expertise in AWS (EC2, Lambda, ECS) and PostgreSQL, with hands-on experience building performance-driven APIs and cloud-native systems. Adept at mentoring developers, leading architectural decisions, and delivering secure, resilient applications aligned with OWASP and GDPR standards. Recently completed a Master of Applied Cyber Security from Federation University Australia, strengthening expertise in secure system design, incident response, and modern cybersecurity practices.

Work Rights: Legally authorized to work in Australia (full work rights).

Work Experience

Software Engineer at NeST Digital Pvt Ltd, Kochi, Kerala, India (June 2022 – May 2023)

Architected and developed scalable HRMS modules supporting 500+ internal users, optimizing backend workflows and reducing API response time by 40%.

Key Responsibilities:

- Worked directly with Australian end-user requirements through remote delivery and client collaboration.
- Automated deployment via CI/CD pipelines (GitLab), reducing manual effort and release time by 30% while increasing release consistency.
- Deployed containerized services on AWS ECS and automated rollouts via GitLab CI/CD, increasing deployment reliability and reducing downtime.
- Implemented secure coding practices and conducted vulnerability checks, reducing risks of injection and session hijacking.
- Contributed to resilient system design by analyzing anomalies during development and addressing potential data integrity issues.
- Collaborated with QA and DevOps to ensure robust and secure applications for internal operations.
- Mentored two junior developers on secure coding and Git branching strategies to maintain code quality and reduce merge conflicts.

Software Engineer at Coddle Technologies Pvt Ltd, Bangalore, India (March 2019 – March 2022)

Led development of several mobile and web applications across industries.

Key Responsibilities:

- Led architecture and full-stack development of mobile and web applications using Node.js, React, and RESTful APIs, improving delivery speed by 25%.

- Built and secured REST APIs in Node.js and MySQL for e-commerce web and mobile apps, reducing API latency by 35%.
- Partnered with QA teams to identify anomalies and mitigate potential vulnerabilities during testing.
- Implemented caching and optimized queries, improving Lighthouse SEO score from 74 to 92 and enhancing conversion rates.
- Integrated real-time analytics and tracking APIs for e-commerce performance insights, enabling data-driven campaign optimization.
- Worked cross-functionally to align system design with client requirements while safeguarding data quality.
- Deployed scalable Node.js services on AWS Lambda and S3, ensuring 99.9% uptime and faster content delivery.

**Associate Software Developer at Aavana Corporate Solutions Pvt Ltd, Bangalore, India
(February 2018 – March 2019)**

Worked on internal tax computation software with customized modules.

Key Responsibilities:

- Designed and optimized backend computation modules in Laravel and MySQL, introducing validation automation that increased processing accuracy by 20% and reduced execution time by 35%.
- Streamlined data synchronization via REST APIs, reducing manual reconciliation time by 50%.
- Performed unit testing and collaborated on documentation to support incident troubleshooting.
- Contributed to robust backend logic that improved reliability and accuracy of internal data processing systems.
- Collaborated with product owners to translate business rules into modular backend services, improving maintainability and reducing codebase complexity.

Education

- Master of Applied Cyber Security, Federation University, Ballarat, Australia –**GPA: 6.625 / 7**
- Master of Computer Application, Amal Jyothi College of Engineering (MG University), 76%
- BSc Computer Science, Assumption College, India (MG University), 79%

Technical Skills

- **Frontend Development:** React.js, Next.js, Angular, JavaScript (ES6+), TypeScript, HTML5, CSS3
- **Backend Development:** Node.js, Express.js, PHP (Laravel), RESTful APIs, Microservices
- **Database Management:** PostgreSQL, MySQL - schema design, indexing, query optimization
- **Cloud & DevOps:** AWS (ECS, Lambda, S3, CloudWatch), Docker, GitHub Actions, GitLab CI/CD, Jenkins (deployment automation)
- **Testing:** Jest, Postman, Unit & Integration Testing

- **Security:** OWASP practices, JWT Authentication, GDPR, ISO 27001 principles
- **Tools & Workflow:** Agile/Scrum, Jira, Figma, Git-based collaboration

Projects

Content Analytics Dashboard

Next.js, Node.js, PostgreSQL, AWS Lambda, Chart.js

- Built a content analytics platform simulating ad performance tracking, processing 100K+ mock events daily.
- Implemented event-driven architecture using AWS Lambda and S3 for real-time insights.
- Used PostgreSQL for data warehousing and optimized dashboard queries for 60% faster reporting.

HRMS Web Application – NeST Digital

Angular, Spring Boot, REST APIs, CI/CD, MySQL

- Delivered full-stack features including UI development, API integrations, and database workflows within Agile sprints.
- Developed responsive role-based dashboards improving internal workflow visibility and efficiency.
- Built CI/CD automation pipelines, reducing manual deployment effort and release time by 30%.

E-commerce Mobile & Web App – Coddle Technologies

React Native, ReactJS, Node.js, REST APIs, MySQL

- Built mobile and web front-ends with secure checkout, payment gateway, and Wishlist features.
- Integrated and optimized REST APIs, improving application performance and user experience
- Converted Figma designs into responsive UI components.
- Implemented CRUD operations and JWT authentication.
- Wrote unit tests for API endpoints.

Research & Academic Projects (Cybersecurity)

Incident Response & Zero Trust – SolarWinds Breach (2020): Researched one of the largest supply chain attacks, focusing on incident response processes, IP reputation scoring, and Zero Trust approaches to protect network integrity and client outcomes.

Blockchain for Digital Forensics & Incident Management (Research Project): Explored decentralized validation models for fraud prevention, closed-loop event validation, and proof-of-work checks, strengthening trust and authenticity of digital evidence.

Leadership & Collaboration

- Mentored junior developers and code reviewers in secure development practices.

- Improved agile sprint velocity by 20% by introducing code linting, peer reviews, and sprint retrospectives.
- Advocated adoption of AI-assisted tools (GitHub Copilot) for faster code generation and test automation.

Workshops & Training

- **Cybersecurity Basics Training** - BSides Ballarat (May 2025) - Organized by Borderless CS and BSides, Ballarat
- **MRE 2024 – Malware & Reverse Engineering Conference**, ICSL, Federation University – Attended sessions on malware analysis, incident response, and threat intelligence. (*Feb 2024*)

Certifications

- Oracle Academy – Database Design and Programming with SQL (Completed April 2016)
- CompTIA Security+ (In Progress)