# Ganga Lakshmi Mudda

# **Profile**

Dynamic and results-oriented Software Engineer with over 2 years of experience designing and building scalable, high-performance applications. Proficient in backend development using Node.js, Express.js, and NestJS, combined with deep expertise in database management with PostgreSQL and MongoDB. Adept at creating, engaging frontend experiences with React.js and implementing modern DevOps practices using Docker and AWS. Passionate about innovative problem-solving and continuously enhancing system performance and architecture to drive business success.

#### Technical Skills

Technologies/Frameworks: Node.js, NestJS, PostgreSQL, MongoDB, React.js, Express.js, FastAPI, Ubuntu, Tailwind

CSS, RESTful APIs, React Native, MERN Stack, Redis, Websocket, Microservices

Cloud & DevOps: AWS (EC2, S3, SES, ECR), Docker, Kubernetes, Server side scripting, Jenkins CI/CD & Automation: GitHub Actions, GitLab, CI/CD Pipelines, PM2, Nginx, Grafana, Prometheus

Languages: HTML/CSS, JavaScript, SQL, Python, TypeScript

Developer Tools: VS Code, PyCharm, Postman, Git Bash, Android Studio

# Experience

Roxiler Systems July 2023 - Present

Software Engineer Pune, India

- During my tenure at InMed Prognostics, Collaborated with a cross-functional team to design and develop a MERN stack application for patient disease identification. Implemented key features including DICOM file uploads, worklist dashboard management, and user management functionalities.
- Improved User Onboarding & Security: Designed robust APIs for OTP verification, email onboarding automation, dual verification, free trial subscription activation, and automatic monitoring of subscription expirations, which improved the inmed's onboarding process and reduced spam account registrations by approximately 35%.
- Enhanced Data Analysis & Chatbot Development: Performed data science tasks by parsing and analyzing .eml files to extract critical information using Python-based data models. Contributed to the development of a penetration testing chatbot using Python, FastAPI, and React.js, which automated vulnerability assessments, reduced manual testing efforts by 40%, and decreased zap scan runtime by 10 min through the integration of Docker-based scanner IDs

Roxiler Systems July 2023 - March 2024

DevOps Engineer Pune, India

- Worked as part of the DevOps team, Led the setup and configuration of Redmine on AWS, including theme customization, plugin integration, email notifications, and SSL certificate management for domains.
- Monitored system performance using Grafana and Prometheus by setting up alerts, performance graphs, and addressing disk optimization issues.
- Optimized Deployment Processes: Streamlined automatic deployment using Jenkins, CI/CD Pipelines, and AWS services, reducing overall deployment time and accelerating the development cycle by approximately 30%.
- Enhanced System Efficiency: Developed AWS Lambda scripts to identify and remove unused resources, achieving a 10% reduction in monthly AWS costs.

Roxiler Systems Dec 2022 - July 2023

Software Engineer Intern — Backend Developer

Pune, India

- Contributed to backend development for modules such as customers, resources, departments, and billing, adding features for user management, resource tracking, activity monitoring, and employee deactivation.
- Optimized database performance through migrations and developed robust APIs using NestJS and PostgreSQL. Efficiently deployed the backend on AWS EC2 using PM2 and Nginx.

### Education

### RGUKT Srikakulam (IIIT)

B. Tech (Computer Science and Engineering)

July 2019 - May 2023

Srikakulam, AP

RGUKT Srikakulam (IIIT)

July 2017 - May 2019

Srikakulam, AP

PUC (Pre-University Course)

# Resource Planner | NestJS, PostgreSQL, PM2, AWS

January 2023

- Contributed to backend development by designing and enhancing modules for customer management, skills, resources, departments, designations, activity tracking, and billing systems.
- Developed and implemented APIs for efficient customer creation and retrieval, streamlining organizational data management.
- Implemented features in the resources module for bill revision, resource history management, and retrieval of resource profiles, as well as managing reporting manager assignments.
- Built department and designation modules and tracked user and resource activities, including handling database migrations.

# InMed | Node.js, MongoDB, AWS, Express.js, React.js, Redis

August 2024

- Worked as part of the backend team on various InMed products. Implemented user registration features, including email verification, onboarding emails, and dual verification using AWS SES.
- Added features such as subscription trial expiration notifications, utilizing cron jobs for 24/7 monitoring.
- Developed product templates incorporating file download functionality and zip uploads to enhance user experience.

## GenAI - VAPT APP | Python, FastAPI, React.js, AWS OpenSearch, Docker

December 2024

- Engineered an advanced automated vulnerability assessment and penetration testing system with a dynamic conversational interface.
- Developed FastAPI-based APIs with integrated WebSocket communication to invoke security tools—nmap, ferox, owaspzap, and sqlmap—triggered by an LLM based on detected vulnerable endpoints and utilized Mongodb for database management.
- Configured the system to generate and deliver comprehensive JSON reports for efficient vulnerability analysis. Designed a responsive and intuitive React.js chat interface to enable real-time user interactions with the security testing system.

# E-commerce App | Node.js, React.js, MongoDB, Tailwind CSS

October 2024

- Architected and implemented a robust e-commerce application using the MERN stack, delivering a seamless and responsive online shopping experience.
- Developed scalable RESTful APIs with Node.js and MongoDB for efficient data management and product catalog operations. Utilized React.js combined with Tailwind CSS to design a modern, responsive UI that adapts across devices.
- Employed Redux for centralized state management, ensuring smooth and predictable data flow across components. Integrated secure payment processing through PayPal sandbox environments, enabling reliable and efficient transaction handling.

## Certifications / Courses

- SQL Fundamentals Track by DataCamp
- AWS Virtual Internship by AWS Academy
- NestJS + PostgreSQL by Udemy
- Docker Course by Udemy

## Soft Skills

- Time Management
- Problem-Solving
- Communication
- Team Work