

KARTHIK KOLAMURI

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Professional Summary

Full Stack Developer with 2+ years of hands-on experience in web and backend development, specializing in **Node.js**, **Express.js**, and scalable **RESTful APIs**. Demonstrated ability to improve API performance by 40% and reduce server response times by 30%. Skilled in building secure, maintainable systems using **JWT**, **bcrypt**, and modular middleware. Passionate about solving real-world problems through clean code, CI/CD pipelines, and collaborative Git-based workflows. Recognized at the **MSME National Hackathon 3.0** with a 7 Lakh grant for developing an innovative government-backed healthcare platform.

Education

SASI Institute of Technology and Engineering

Bachelor of Technology in Computer Science and Engineering

Tadepalligudem, India

Aug 2022 - Expected Jun 2026

- **CGPA:** 8.5 / 10
- **Relevant Coursework:** C Programming, Python, Data Structures and Algorithms (C), Introduction to Computer Science II, Operating Systems, Computer Networking

Narayana Junior College

Intermediate (Mathematics, Physics, Chemistry)

Kakinada, India

2020 - 2022

- **Percentage:** 81%

Internship

Web Developer Intern

Jan 2025 - Mar 2025

Aadi Foundation (Remote)

- Developed and deployed scalable RESTful APIs using Node.js and Express, enabling seamless integration between services and reducing request latency by 25%.
- Built a robust authentication system using bcrypt and express-session, supporting 1,000+ concurrent user sessions with secure credential management.
- Maintained Git-based workflows, managing over 10 feature branches; enforced pull request standards and resolved merge conflicts to ensure CI/CD stability.
- Refactored API architecture with modular middleware and asynchronous handlers, improving backend efficiency and reducing server response time by 30%.
- Implemented centralized error logging with custom middleware, accelerating issue identification and cutting bug resolution time in half.

Projects

Medicare - The Health Care Platform | MERN Stack, Stream API, REST, JWT, RBAC

- Selected for **MSME National Hackathon 3.0** and awarded a **7 Lakh grant** to develop this government-backed healthcare platform prototype.
- Developing a secure, role-based telemedicine app offering real-time chat, video consultations, appointment scheduling, and blood bank locator.
- Integrated **Stream Chat** and **Stream Video APIs** to enable HIPAA-compliant doctor-patient communication with encrypted session handling.
- Implemented **Role-Based Access Control (RBAC)** for Admin, Doctor, and Patient accounts to enforce data privacy and authorization logic.
- Architected scalable backend using modular Express middleware and asynchronous workflows, ensuring high system responsiveness under load.

BlogNest - Write, Share, Inspire | MERN Stack, JWT, SendGrid, MVC Architecture

- Developed a blog platform with full CRUD functionality, rich text editing, and admin moderation dashboard.
- Designed and implemented secure password recovery using SendGrid, token expiration, and encrypted routes.
- Adopted MVC architecture to ensure maintainable, testable code with clear separation of concerns.

Book Store Management System | *Node.js, Express.js, MongoDB, EJS, CSRF Protection, Nodemailer*

- Built a secure and scalable e-commerce platform for managing books, users, and orders with user authentication and session control.
- Implemented user account features including signup, login, logout, and password reset, secured with bcrypt hashing and express-session management.
- Added pagination and dynamic search/filter functionality using MongoDB queries to support efficient browsing across large datasets.
- Incorporated CSRF protection and server-side input validation to mitigate common security threats and protect user data integrity.
- Integrated email notifications using Nodemailer for password recovery and transactional alerts (e.g., order confirmation).
- Designed MongoDB schema to support order tracking, user roles, and inventory management with future scope for admin dashboard and analytics.

Technical Skills

Languages: JavaScript, Python, C, Java, SQL

Web Development: Node.js, Express.js, React.js, EJS, Pug, Bootstrap, HTML5, CSS3

Databases: MongoDB, MySQL, PostgreSQL, Firebase

DevOps/Tools: Docker, Jenkins, Git, GitHub, Postman, Vercel

Authentication & Security: JWT, bcrypt, CSRF Protection, express-session

Cloud/Hosting: Vercel, Render, Firebase Hosting

Other Skills: REST APIs, MVC Architecture, Agile Methodology, CI/CD Pipelines

Certifications

NodeJS - The Complete Guide (MVC, REST APIs, GraphQL, Deno) – Udemy

[View Certificate](#)

Software Engineer Certificate – HackerRank

[View Certificate](#)

Problem Solving Certificate – HackerRank

[View Certificate](#)

Technology Virtual Experience Program – Deloitte Australia (Forage)

[View Certificate](#)

Full Stack Developer Certification – Oneroadmap

[View Certificate](#)

Achievements & Recognitions

Selected for **MSME Nationwide Hackathon 3.0** and awarded a **7 Lakh grant** for proposing an innovative tech solution addressing real-world healthcare challenges.

Recognized for problem-solving capabilities and entrusted with scaling the prototype under a government-backed initiative.