

# KARTHIK KOLAMURI

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## Professional Summary

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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.

## Technical Skills

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**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, microservices.

## Projects

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### 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.
- Executed **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.
- Designed 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.

## Internship

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### 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.

## Education

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### SASI Institute of Technology and Engineering

Tadepalligudem, India

*Bachelor of Technology in Computer Science and Engineering*

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

Kakinada, India

*Intermediate (Mathematics, Physics, Chemistry)*

2020 – 2022

- **Percentage:** 81%

## Certifications

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### 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

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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.