

Rajarshi Mandal

+91 97489 64763 | ✉ rajarshim5@gmail.com | 📍 Barrackpore, Kolkata, India

🔗 [LinkedIn](#) | 🐙 [GitHub](#)

Backend Engineer | MERN Stack Engineer

PROFESSIONAL SUMMARY

Results-driven Backend Engineer | MERN Stack Engineer with 3+ years of experience in designing and developing scalable backend solutions. Proficient in Node.js, React, Next.js, Nest.js, PostgreSQL, MongoDB, WebSocket, and payment gateway integrations, with expertise in building high-performance, data-driven applications.

Key projects include:

- School Management System (attendance, payroll, transport, access rights, notifications).
- Marketplace, Messaging and Payment Platforms.
- IoT & GPS Tracking Systems (geofencing, real-time tracking).
- Blockchain Solutions (crypto payments, DAO, smart contracts).

Strong ability to handle end-to-end project lifecycles, optimize REST APIs & microservices, and ensure secure, high-performance architectures.

KEY COMPETENCIES

- Backend Development: Node.js, Nest.js, Express.js
- Frontend Development: React.js, Next.js, Redux, TailwindCSS
- Database Management: MongoDB, PostgreSQL, MySQL, Firebase
- Real-Time & Payments: WebSockets, Stripe, PayPal, Razorpay, Braintree
- Blockchain & Web3: Solidity, Smart Contracts, DAO, Crypto Payments
- Cloud & DevOps: AWS (S3, EC2), Docker, Jenkins, CI/CD
- Leadership & Collaboration: Proven ability to mentor junior developers and collaborate across teams for efficient project execution.

PROFESSIONAL EXPERIENCE

Aug 24-Present

AnandPushp Technologies Pvt Ltd

Software Developer

- Developed a large-scale School Management System with modules for attendance, payments, leave management, and more, leveraging PostgreSQL and MongoDB for efficient data handling.
- Designed and implemented a real-time Vehicle Tracking System using tracking devices for bus conductors, students, and staff. Later, rewrote the system in Go, enhancing performance and concurrency.
- Built and optimized Employee Payroll and Student Fee Management Systems, incorporating payment ledgers, late fee calculations, and complex financial computations to streamline operations.
- Automated bulk processing by creating and handling dynamic forms, PDFs, and Excel/CSV files, improving workflow efficiency.
- Integrated a robust Notification System, enhancing real-time communication and system efficiency.

Excellis IT pvt Ltd.

Dec 22- Aug 24

Software Engineer

- Led the full development lifecycle of multiple marketplace platforms using Node.js, Nest.js, and Next.js, ensuring seamless production deployment and scalability.
- Migrated a Laravel-based chat application to a Node.js and React stack, achieving a 70% reduction in API response time and improving message delivery speed by 2-3x, significantly enhancing user capacity.
- Integrated multiple payment gateways, including Stripe, PayPal, Adyen, Razorpay, and Braintree, streamlining transactions and enhancing the user experience.
- Developed an innovative IoT-based GPS tracking system, implementing geofencing and stealth detection for enhanced tracking accuracy.
- Optimized MongoDB performance and ensured data integrity while managing large-scale datasets.
- Proactively identified and resolved critical bugs, ensuring seamless functionality across development, testing, and post-launch phases.

- Developed scalable backend services using Node.js, ensuring seamless integration with React/Next.js for frontend operations.
- Authored and deployed smart contracts in Solidity, enhancing the company's blockchain capabilities and security.
- Led the development of a crypto payment portal, contributing to both frontend and backend, ensuring a secure and efficient transactional process.
- Built a DAO voting application, enabling decentralized governance and stakeholder engagement.
- Implemented a coin swap feature, allowing users to exchange cryptocurrencies efficiently and securely.
- Adapted quickly to a fast-paced startup environment, embracing new technologies and contributing to multiple innovative projects.

EDUCATION

🎓 Master of Computer Applications (MCA), 2020-2022 | 9.72 CGPA | Maulana Abul Kalam Azad University of Technology

- ★ Built the current live website of University's Information Technology department from scratch.

<https://it.makautwb.ac.in/>

- ★ Worked on Fuzzy C-means clustering with Python as major project.

🎓 Bachelor of Science (BSc), 2016-2020 | 55% | University of Calcutta

KEY ACHIEVEMENTS

- Successfully handled and contributed to already existing backend in production, ensuring smooth operation and adding new features and modules seamlessly.
- Optimized API performance, reducing response times by 70% and message delivery speed by 2-3x in a real-time chat app.
- Rebuilt a robust GPS tracking system in Golang, improving performance and concurrency.
- Integrated multiple payment gateways through a single form, enhancing transaction security and versatility.
- Developed and deployed blockchain-based smart contracts, ensuring reliability and automation.

TECH-STACK

Programming language	Backend	Frontend	Database
Javascript	Node.js	React.js	MongoDB
TypeScript	Express.js	Next.js	PostgreSQL
Python	Nest.js	Redux/Context	MySQL
Solidity	Websocket	Tailwind / Bootstrap/	AWS S3
	Socket.io	CSS	Firebase
	Web3.js		