

Amritendu Bhattacharjee

Senior Software Engineer | MERN stack | Distributed Systems |
Cyber Security Enthusiast

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Profile Summary

Hi, I am a passionate MERN Stack Developer with over 5+ years of experience developing cross-platform applications and software solutions. Adept at utilizing the latest technologies to deliver efficient, scalable, and user-friendly distributed systems. My usual day at work involves translating business ideas into fully functional features, code-reviewing and mentoring juniors. I love reading about various system designs and developing personal projects when I am not at work.

Employment History

Senior Software Engineer at Optym, Bengaluru, April 2022 – present

- Spearheaded react application refactoring resulting in reduction of FCP from 6.7sec to 2.8sec.
- Developed a reusable components library using react with storybook, facilitating consistency and collaboration across multiple projects.
- Designed and developed features for tracking and presenting analytics data.
- Collaborated closely with cross-functional teams including UI/UX designers, backend developers, and project managers to ensure seamless integration of frontend and backend components.
- Mentored junior developers on React lifecycle methods and effective use of state management.
- Conducted code reviews and provided constructive feedback to peers and junior developers.

Software Engineer at RazrLab, Bengaluru, May 2020 – April 2022

- Developed a B2B platform offering live tracking and analytics, catering to diverse client needs and ensuring seamless user experiences.
- Architected and implemented a Platform as a Service (PaaS) product, consolidating services for 15 B2B clients onto a single generator stack, resulting in significant cost savings and streamlined operations.
- Worked on tracking systems for the Dubai Police
- Implemented end-to-end encryption over socket connection, ensuring secure communication channels and protecting sensitive data from unauthorized access.
- Integrated broker agents like RabbitMQ.
- Designed and developed Express API servers with caching mechanisms and microservices architecture.

Full stack Developer and SME (InfoSec) at CBNITS (NatITSolved Pvt Ltd), Kolkata, Nov 2018 – April 2020

- Garnered extensive experience in MERN stack development, leveraging its components to build dynamic and scalable applications.
- Proficiently handled PKI, cryptography, file systems, and encryption/decryption, ensuring robust security measures in software solutions.
- Successfully implemented storage-agnostic information rights management solutions, ensuring data security and compliance across diverse storage platforms.
- Implemented multi-tenancy and internationalization, catering to diverse user bases and global scalability requirements.
- Engineered cross-platform clients, ensuring seamless user experiences across diverse environments and devices.
- Demonstrated proficiency in managing international client relationships, fostering trust and collaboration for business growth.

Technical Skills

Programming Languages:

JavaScript, Typescript

Frontend: ReactJS, React Native, ElectronJS, NextJS, MaterialUI, Tailwind, ShadCn, Less, Sass, MobX, Redux, Micro frontend, Webpack, Rollup, Vite, Bootstrap, Bulma, Ant, Design Principles, Component Library

Backend: NodeJS, ExpressJS, NestJS, Redis, RabbitMQ, GraphQL, Microservices, ETL Servers, Cognito, AWS KMS, Lambda Serverless, AWS Glue, JSON, XML, API Gateway, SDK design, Distributed Systems.

Database: MongoDB, DynamoDB, PostgreSQL, SQLite, AuroraRDS

Version Control: Git, GitHub, GitLab

Hosting: AWS, Amplify, Firebase, Heroku

Tools & Project Management:

RestAPIs, Postman, yarn, npm, pnpm, JIRA, ClickUP, Azure Boards, Datadog, Cloudwatch, Confluence, Notion, Git Workflow and Actions, Jenkins

Projects

GateAI – Gate optimization solution for airports

Airport management system for ground operations. Which was successful at handling representation and processing of approx. 10,000 data points at an interval of 5 minutes.

Techstack: NextJS, NestJS, GraphQL, MobX, MaterialUI, DynamoDB, AuroraRDS, Module Federation (Micro frontend), Bryntum Gantt, AWS Glue (ETL), Cypress, Docker, Git workflow.

LoadOps – TMS and Route optimizer, solution for trucking industry

An end-to-end TMS solution to manage assignments, drivers, loads, trips and contracts and provide optimized results based on constraints set by user.

Techstack: ReactJS, NodeJS, ReactQuery, MaterialUI, React-hook-forms, Tailwind CSS, Axios, Redis, MobX, Distributed System, PostgreSQL, React Testing Lib, Cypress, Docker, Azure pipelines, WebSocket, AES Encryption.

Razr – PaaS application for live tracking and analytics

A PaaS application leveraging IoT sensors to enable real-time visualization, KPI derivation, and efficient fleet management, showcasing expertise in IoT integration and data-driven insights.

Techstack: ReactJS, ExpressJS, NodeJS, MongoDB, RabbitMQ, Redux, Thunk, React Tools, Saga, Jest, React Testing Lib, WebSocket, PKI, end to end encryption, Docker.

I2Chain App – Storage agnostic security

A storage agnostic platform for sharing files within a secure environment supporting clients web app, desktop app, email add-ins and third-party integrations.

Techstack: ReactJS, NodeJS, ElectronJS, MaterialUI, MongoDB, AWS KMS, Cognito, Outlook Addin SDK, Gmail Addon SDK, Jest, EC2, ExpressJS, PKI system, RBAC, Multi-tenancy

Knnova Academy mobile client – EdTech App

Interactive learning and certification platform.

Techstack: React Native, ExpressJS, NodeJS, Redux, MySQL, React Testing Lib.

Education

MS in Cyber Security at University of Southampton, England, UK 2015–2016

- Acquired practical exposure to live penetration testing techniques and tools.
- Explored the intricacies of cryptography.
- Familiarized with the Security Analysis.
- Wrote a dissertation showcasing vulnerabilities in Near Field Communication (NFC).

Bachelor of Computer Application at West Bengal University of Technology (WBUT), Kolkata, IN 2011–2014

- Gained a comprehensive understanding of fundamental and advanced concepts in computer science,
- Coursework encompassed programming languages like C, C++, Java, PHP, data structures, algorithms, database management systems, software engineering and computer networking.
- Actively participated in practical sessions, projects, and seminars to enhance both practical skills and theoretical knowledge of computer applications.

Recognition

- Won citizen bank challenge hackathon for a client.
- Best team of the quarter (CBNITS)
- Star performer (CBNITS)
- Awarded midyear increment and ESOPS for performance.

Certifications

- Hacker Rank React
- Hacker Rank JavaScript