

JAY AGGARWAL

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Education

The LNM Institute of Information Technology

Bachelor of Technology in Computer Science Engineering

Jaipur, India

Aug 2022 – April 2026

Professional Experience

Full Stack Developer (Freelance)

May 2025 – June 2025

TRIX Technology

Remote

- Architected and deployed "ExamPortal," a scalable full-stack web application designed to support over 1,000 concurrent users, featuring live proctoring and real-time analytics dashboards.
- Developed and integrated over 25 RESTful APIs using Node.js, Express.js, and MongoDB to ensure seamless exam creation and secure data submission.
- Optimized backend performance by 40% through strategic MongoDB schema redesign and the implementation of advanced aggregation pipelines.
- Implemented robust, secure user authentication and role-based access control (RBAC) for 4 different user roles utilizing JSON Web Tokens (JWT).

Software Engineering Intern

May 2024 – July 2024

Techgeekz Services

Surat, Gujarat

- Spearheaded the design and launch of the official company website, leading to a 30% increase in user engagement and a 15% growth in lead generation.
- Enhanced website efficiency by 40% by implementing targeted performance optimizations, including image compression and code refactoring.
- Collaborated within a 5-person development team to integrate over 10 new features, accelerating the development cycle by 25%.

Projects

Plagiarism Checker Web App

Jan 2024 – Apr 2024

Technologies: React.js, Node.js, Express.js, Google Cloud Storage, OpenAI API

- Constructed a full-stack plagiarism detection tool implementing a cosine similarity algorithm that achieved 95% accuracy in text comparison tests.
- Integrated Google Cloud Storage for file uploads and leveraged the OpenAI API for advanced semantic analysis.
- Developed a user-friendly, browser-based interface enabling file scanning, OCR-based text extraction, and side-by-side visual comparisons, with an average processing speed of 5 seconds per document.

Soundscape – Music Streaming Platform

May 2024 – July 2024

Technologies: React.js, Node.js, Express.js, MongoDB

- Built a full-stack music streaming service that allowed users to create accounts, manage custom playlists, and stream audio in real-time from a 10,000+ song database.
- Integrated a third-party API for music streaming and implemented comprehensive audio playback controls.
- Improved data retrieval performance by 30% by optimizing MongoDB query structures.

Skills

Languages: JavaScript, TypeScript, C++, Java, SQL

Frontend: React.js, Redux, HTML5, CSS3, TailwindCSS, Bootstrap

Backend: Node.js, Express.js, MongoDB, Mongoose, REST APIs, GraphQL, JWT, bcrypt

DevOps & Tools: Docker, Git, GitHub Actions, CI/CD, Postman, Render, Vercel, Firebase, Agile

Leadership & Activities

Tech Lead

Sep 2024 – Feb 2025

E-Summit, LNMIIT

Jaipur, Rajasthan

- Acted as the primary communication bridge between a 10-developer team and event stakeholders, translating the project vision into technical tasks and presenting regular progress reports.