

Harsh Agarwal

• +917977128693 • harshagar122005@gmail.com • linkedin.com/in/harsh-agarwal-a31b4528b • Portfolio • Mount Abu, Sirohi, Rajasthan

Profile

Third year CSE student (CGPA 9.39) at JIET with experience in full stack web apps, Artificial Intelligence, Database Management and IoT automation. Built production style projects using Next.js, FastAPI, RAG pipelines and ESP32. Multiple times hackathon winner and regular event anchor.

Projects

LitWise

- An AI powered book recommendation platform leveraging machine learning algorithms.
- Next.js, FastAPI and Goodreads dataset. K-Means clustering, TF-IDF cosine similarity.

Literate

- An AI powered, full stack reading application designed for enhanced comprehension and focus.
- Enables users to upload books and interact with a smart assistant that answers context aware questions.
- Retrieval Augmented Generation (RAG) pipeline, Next.js, TypeScript, Google Genkit and Firestore.

StudyMate

- Full stack application to centralize learning materials into structured subjects, streamlining the study process.
- Built a context aware AI tutor using React, Node.js, Supabase and Gemini API that answers questions directly from the uploaded resources.

Unified AI Tools Hub

- A web application integrating a Photo Editor, Text-to-Speech background music generator and Youtube Video Downloader.
- React, TailwindCSS, Azure Cognitive Services, ImageKit, and MongoDB

Youtube SideView

- A Chrome extension that improves YouTube user experience by implementing a dual pane interface with resizable side panels for video descriptions and comments.
- Content switching using JavaScript, DOM manipulation and Chrome Extension APIs.

BlogWave

- A full stack blogging platform enabling user to create, share, explore diverse content and community engagement.
- Create and managing blog posts, while ensuring robust user authentication and data security.
- Node.js, Express.js, MySQL, Multer, etc.

Skills

- **Data Structures & Algorithms**
- **Problem Solving**
- **Machine Learning & Data Science**
- **Soft Skills** (Communication | Event Anchoring)
- **Programming Languages** (C | Python | Java | JavaScript | TypeScript)
- **Other** (ESP32 | Chrome Extensions | Git)
- **Web Development** (React | Next.js | Node.js | Express | TailwindCSS)

Certifications

Artificial Intelligence: Concepts and Techniques, Indian Institute of Science Bangalore

Design and Analysis of Algorithms, Chennai Mathematical Institute

Database Management System, Indian Institute of Technology Kharagpur

Introduction to Programming in C, Indian Institute of Technology Kanpur

Ethics in Engineering Practice, Indian Institute of Technology Kharagpur

Innovation, Business Models and Entrepreneurship, Indian Institute of Technology Roorkee

Achievements & Activities

- Regular Event Anchor** — College institutional events and programs
- Innovate 2025** — 2nd Place — Hackathon organized by MANIT J, Modi University and Thapar Institute
- Hack-ito 2023** — 1st Place — College Ideathon for Smart India Hackathon
- Hack-ito 2024** — 2nd Place — College Ideathon for Smart India Hackathon
- LaunchPad Challenge 2024** — Top 6 — Startup pitching at iStart Jodhpur

Education

B.Tech CSE 3rd Year, Jodhpur Institute of Engineering and Technology (CGPA: 9.39) **September 2023 – Present** | Jodhpur, India

Higher Secondary Education, Adarsh Vidya Mandir Shankar Vidya Peeth (78%) **June 2021 – March 2023** | Mount Abu, India