

ANOOP TRIPATHI

6306685886 | anooptripathi81974@gmail.com | [linkedin/anoop](https://www.linkedin.com/in/anoop) | [github/anoop](https://github.com/anoop) | [portfolio/anoop](https://portfolio.anoop)

EDUCATION

Indian Institute of Technology Patna

B.Tech in Artificial Intelligence and Data Science

Aug. 2024 – Apr. 2028 (Exp)

CGPA: 9.08

Police Modern School, Lucknow, U.P

Senior Secondary (Class 12th)

May 2023

Grade: 93.8%

Heritage Academy, Gorakhpur, U.P

Secondary (Class 10th)

Aug. 2021

Grade: 86.4%

PROJECTS

SecureSeat-Criceco: Cricket ticketing platform | React, Node.js, FastAPI, PostgreSQL [GitHub](#) | Spring 2026

- Engineered a scalable microservices based, 3-role Cricket ticketing platform (React, Node.js, FastAPI) increasing user experience by interactive **3D view seat mapping** using **React Three.js**.
- Implemented a distributed **Redis seat-locking system** using atomic operations **reducing race conditions to 0%**, validating zero double-bookings, tested via a Python load-testing script that simulated 10,000 requests.
- Developed a privacy-ensuring **AI anti-scalping pipeline** using **YuNet/SFace** and PostgreSQL **pgvector**, enabling **real-time biometric identity verification** via cosine-similarity of 128D vectors **reducing biometric storage overhead by over 90%**. Implemented secure authentication using JWT-based session handling.
- Implemented a **dynamic pricing** engine algorithm driven by real-time scarcity and time-decay, backed by ACID-compliant PostgreSQL to guarantee transaction integrity and condition based pricing.
- Deployed frontend on Vercel and backend, AI services on Render: [Deployed Link](#)

Smart Job Portal Full Stack Platform | React, Express, MongoDB, Socket.io, LangChain [GitHub](#) | Winter 2025

- Designed a 2-role job platform with 34 REST API endpoints and 7 MongoDB models for real-time messaging via **Socket.io**, inbox features, job postings (by recruiter roles), resume enhancement and dynamic status updates.
- Integrated **LangChain GenAI-based resume enhancer** to deliver targeted role-specific suggestions, decreasing resume enhancement time implemented by HuggingFace APIs and OCR-based resume text extraction.
- Enhanced networking by using **real-time messaging system using Socket.io**, separate inbox view, reducing need of separate app connections.
- Implemented secure **JWT authentication** and bcrypt hashing. Built user profiles, blogging with comments, follow/like system, application posting and tracking system. [Deployed Link](#)

DevOnboard AI | React, Node.js/Express, Python, PostgreSQL + pgvector, Ollama, Docker [GitHub](#) | Spring 2026

- Implemented a local **RAG QnA assistant** for the codebase using Ollama embeddings for semantic context, PostgreSQL with pgvector as the vector store, Node.js/Express API backend and a React/Vite frontend.
- Built a Python ingestion pipeline to chunk files, index them as embeddings, and run nearest-neighbor vector search **reducing prompt context size by over 50%**, generating source grounded answers with Ollama

SKILLS

Full-Stack Web: HTML, CSS, JavaScript, Node.js, Express.js, React.js, MongoDB, PostgreSQL, Redis, Docker

AI/ML: Machine Learning, Deep Learning, Transformers, OpenCV, FastAPI, LangChain, GenAI

Systems & DSA: C, C++, Python, DSA, **Codeforces (Max Rating: 1469)** [\[Profile Link\]](#)

ACHIEVEMENTS

Flipkart GRID 8.0 Semi-Finalist : Qualified for round 3 out of 1.65 Lakh participants.

Competitive Programming: Achieved max rating of **1469 (Specialist) on Codeforces**; solved 1000+ problems across Codeforces and LeetCode. **3-star** rated on CodeChef.

JEE Advanced 2024: Secured **AIR 6100** among 1.8 Lakh candidates.

Academic: Maintaining a **9.08 CGPA** at Indian Institute of Technology Patna.

COURSEWORK

Computer Science: Programming and Data Structures, Algorithms, DBMS, Artificial Intelligence, Data Analysis

Mathematics: Discrete Mathematics, Optimization Techniques.

EXTRA-CURRICULAR ACTIVITIES

Sub-coordinator, Guest Lectures and Exhibition — Celesta '25, IIT Patna

- Coordinated high-profile guest lectures and tech exhibitions for the annual Techno-Management fest.

Sub-coordinator, Sparkonics Tech Club — IIT Patna

- Created digital assets and coordinated educational sessions for Electrical and Electronics workshops.