Ronak Anand

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DOB: 13 February, 2007
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Github

Education

Indraprastha Institute of Information Technology, Delhi — CGPA: 5.60
B.Tech (CSE with AI) — (Till 4th semester)
2024 - 2028

Kalka Public School, New Delhi — Percentage: 83.8%
CBSE, Standard 12, PCM+CS
2023-2024

Kalka Public School, New Delhi — Percentage: 85.2%
CBSE, Standard 10
2022

Skills

Expertise Area:	Artificial Intelligence, Full-Stack Development
Programming Languages:	Python, TypeScript, JavaScript, Java, C++, C
Tools and Technologies:	React, Next.js, HTML5, CSS3, Tailwind CSS, Redux, Vite, FastAPI, Flask, Firebase (Auth, Firestore, Storage), PostgreSQL, LangChain, RAG Systems, Google Gemini API, xAI Grok, PyMuPDF, Git, GitHub, Linux, REST APIs, Vitest
Technical Electives:	Data Structures and Algorithms, Signal and Systems, Operating Systems, Discrete Structures, Advanced Programming, Computer Organization, Linear Algebra, Probability and Statistics, Object Oriented Programming

Projects

Custom Unix Shell in C++ — Team Size-1
Guide: Self-Guided — (Dec, 25 - Feb, 26)
Built a Unix-like shell in C++ using POSIX system calls (fork, exec, pipe, dup2, waitpid) supporting pipelines, redirection, and job execution. Implemented a full command parser with quote handling, escaping, history, and tab-completion using GNU Readline. Designed the system with modular execution, parsing, and I/O layers to ensure correctness, extensibility, and memory safety. Repository here.

Acadira AI - AI Powered Learning Platform — Team Size-1
Guide: Self-Guided — (Oct, 25 - Feb, 26)
Built a full-stack AI learning workspace that converts PDFs, DOCX, and PPTs into summaries, flashcards, and quizzes using document-aware RAG. Designed a scalable FastAPI backend integrating multiple LLMs with grounded retrieval to prevent hallucinations. Repository here.

Delhi Metro Route Finder - Graph-Based Navigation System — Team Size-1
Guide: Self-Guided — (May, 25 - Aug, 25)
Implemented Dijkstra's algorithm on a weighted graph to compute optimal metro routes across 200+ stations with sub-100ms response time. Developed an interactive visualization with real-time route highlighting, fare calculation, and REST API support. Repository here.

University ERP System — Team Size-2
Guide: Prof. Sambuddho — (Aug, 25 - Dec, 25)
Developed a production-ready university ERP system with role-based access control, secure authentication, automated grade processing, and PDF transcript generation. Designed a scalable three-tier Java architecture with normalized MySQL schema, connection pooling, and comprehensive JUnit test coverage. Repository here.

Multilingual Medical Appointment Chatbot — Team Size-6
Guide: Prof. Jainendra Shukla — (Jan, 25 - Apr, 25)
Developed a full-stack medical appointment management system with multilingual support, voice-based interaction, and secure user authentication. Built a modular Flask backend using MongoDB Atlas with role-based access control and secure data handling. Repository here.

Positions of Responsibility

Event Assistant @ IEEE IIIT-Delhi Student Branch — (Jan, 25 - Present)
Coordinated logistics for technical workshops and seminars, helping organize multiple events per semester. Assisted in networking initiatives connecting students with industry professionals in AI and software engineering. Supported outreach and community-building activities across campus.

Interests and Hobbies

- Following advancements in artificial intelligence and software engineering through technical articles and research updates
- Building and exploring side projects in AI and backend systems and Full-Stack Development

Declaration: The above information is correct to the best of my knowledge.
Ronak Anand
Date: January 24, 2026