

NAKUL RANA

Full Stack Developer & AI Integration Specialist

+91-6261227418 | nakulrana17008@gmail.com | LinkedIn | Portfolio

PROFESSIONAL SUMMARY

Dedicated Full Stack Developer with **9+ months** of hands-on experience in EdTech industry, specializing in **AI-powered educational platforms**, **LLM integration**, and **scalable web applications**. Proven track record of independently developing and deploying complex multi-role systems serving educational institutions with focus on innovation and user experience.

WORK EXPERIENCE

Software Developer

AdiClasses (EdTech Startup)

November 2024 – Present (9+ months)

Bengaluru, Karnataka

Key Achievements

- Single-handedly developed and maintained **5+ production-ready** educational platforms
- Successfully deployed and managed applications on **Ubuntu Apache servers**
- Integrated multiple **LLM APIs** for content generation and educational tools
- Collaborated with mobile app developers to design and implement **15+ REST APIs**

Core Responsibilities

- Full-stack development using **Python Flask, MySQL, JavaScript, HTML/CSS**
- Database design, optimization, and maintenance for multi-user educational platforms
- Server management and deployment on Ubuntu Apache servers with **WSGI configuration**
- Real-time notification system implementation using **Firebase Cloud Messaging**
- AI/ML integration for automated content generation and educational tools

TECHNICAL SKILLS

Programming Languages

- Python, JavaScript, SQL
- HTML5, CSS3

Frameworks & Technologies

- Flask, Django, Node.js
- Express.js, Bootstrap, jQuery

Databases & Tools

- MySQL, phpMyAdmin, Firebase
- Postman, Git

AI/ML & APIs

- OpenAI GPT, Claude, Gemini, DeepSeek
- LLM Integration, Prompt Engineering
- Batch Processing

Server & DevOps

- Ubuntu Server, Apache, WSGI, Server Management, Production Deployment

Development Tools

- VS Code, Cursor AI, Postman, Firebase SDK, AI-Assisted Development

★ Specialized Skills

- Multi-role system architecture (Student, Teacher, Principal, Admin)
- Real-time tracking systems (Bus tracking, Location services)
- PDF generation and document processing, OMR sheet scanning integration
- Authentication and authorization systems

KEY PROJECTS

School Management System

Production Application

Python Flask, MySQL, JavaScript, HTML/CSS, Firebase

- Developed comprehensive school management platform with **5 user roles**
- Features: Student portal, Teacher dashboard, Principal admin panel, School admin
- Implemented attendance tracking, homework management, timetable creation
- Built ID card generation system and **bus tracking functionality**
- Integrated **OMR sheet scanning** for automated test evaluation
- **Impact:** Currently serving multiple educational institutions

Advanced MCQ Generator

AI-Powered Tool

Python Flask, MySQL, LLM APIs, Chart.js, JavaScript, PDF Processing

- Built intelligent MCQ generation system processing multiple file formats
- Integrated multiple **LLM APIs (OpenAI, Claude, Gemini)** for content generation
- Developed drag-and-drop curation interface for educators
- Implemented advanced PDF generation handling **mathematical formulas and special characters**
- Features: Batch processing, content summarization, flashcard generation
- **Innovation:** Automated educational content creation reducing manual effort by **80%**

Marketing Management Platform

CRM System

Python Flask, MySQL, JavaScript, Chart.js, Firebase

- Designed dual-role platform for Marketing Managers and Executives
- Built **real-time executive tracking** and performance analytics
- Implemented meeting scheduling, notification system, and quiz modules
- Created comprehensive dashboard with revenue tracking and school visit analytics
- Features: Mobile integration, calendar widgets, performance visualization

MyChat - AI Content Generator

Conversational AI Platform

Python Flask, MySQL, Multiple LLM APIs, JavaScript

- Developed multi-model AI chat platform with customizable prompts
- Integrated **5+ LLM models** with model selection functionality
- Built template-based prompt system for various use cases
- Implemented conversation history and content management
- **User Experience:** Simplified AI interaction for non-technical users

EDUCATION

Bachelor of Technology in Computer Science

Dec 2020 – May 2024

Institute of Technology & Management, Gwalior

CGPA: 8.31

Academic Excellence

- Strong foundation in **OOPS, DBMS, Operating Systems**
- Focus on practical application of theoretical concepts

CERTIFICATIONS & LEARNING

Professional Certifications

- **AWS Academy Cloud Foundations Graduate** July 2023
- **Salesforce Developer Virtual Internship** Nov – Dec 2023
- **Business English Certificate Preliminary** (Cambridge English) Apr 2023

Specialized Training

- **AICTE Virtual Internships:** Process Mining, Data Analytics, Cloud Computing
- **Android Developer Virtual Internship** Jan 2023 – Mar 2024
- **AI-ML Virtual Internship** Apr 2023 – Jun 2024

CORE COMPETENCIES

Technical Leadership

- Independent project architecture and development
- End-to-end application lifecycle management
- Problem-solving and debugging expertise

AI Integration Expertise

- Prompt engineering and LLM optimization
- Multi-model AI system integration
- Content generation and automation

Full-Stack Proficiency

- Frontend: Responsive design, UX optimization
- Backend: RESTful APIs, database optimization
- DevOps: Server deployment and maintenance

Languages

- **Hindi:** Native
- **English:** Professional Working Proficiency
- **Japanese:** Basic Conversational

ADDITIONAL INFORMATION

- **Work Philosophy:** Committed to delivering bug-free, scalable solutions with attention to detail and user experience. Passionate about leveraging AI technologies to solve real-world educational challenges.
- **Availability:** Currently employed part-time, available for full-time opportunities with flexible transition arrangements.

Building the future, one intelligent solution at a time