Adarsh Kumar Verma

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EDUCATION

VIT BHOPAL UNIVERSITY

Bhopal, Madhya Pradesh

Bachelor of Technology in Computer Science and Engineering(AI&ML)

Sep 2026

Cumulative GPA: 8.57/10.0

D.P. Public School - Intermediate (92%) Little Flower School - High School (91%) Prayagraj, Uttar Pradesh Harraiya, Uttar Pradesh

PROJECTS

LUMINA RAG (RETRIEVAL AUGMENTED GENERATION SYSTEM)

- Engineered an advanced RAG system that improved information retrieval relevance by over 40% through a hybrid search engine combining FAISS vector similarity and keyword matching
- Architected a scalable Flask backend with four caching layers to enable multi-modal analysis of text and images.
- Secured the multi-tenant platform by implementing end-to-end data privacy, integrating Firebase for multi-provider OAuth 2.0 authentication, and enforcing complete user data isolation across vector stores, caches, and file systems

HEALTECH

- Reduced patient travel time by 62% through AI-driven remote diagnostics, enabling faster treatment and improved healthcare access for patients in underserved rural communities through cross-platform development.
- Designed a scalable backend with Flask and SQL to support future disease integrations, handling 100+ concurrent REST API requests with 99.8% uptime.
- Secured sensitive patient data via OAuth 2.0 and HTTPS, unifying medical history and appointment tracking to streamline care delivery across underserved communities.

STREAMING ANALYTICS DATA ENGINE

- Engineered an ETL pipeline for large-scale data (25M+ records) from TMDB and MovieLens using Python (Pandas) and SQL, creating curated analytical tables for trend analysis.
- Developed an interactive Power BI dashboard to visualize genre performance, forecast demand, and identify content gaps, enabling data-driven decision-making.

SKILLS

Technical Skills: Python, Flutter, Java, Flask, Tensorflow/PyTorch, NLP, Computer Vision, GenAI, Firebase, MySQL, HTML, CSS, Javascript, NodeJs, Git, Github, VS Code, Android Studio

Non-Technical Skills: Figma, UI/UX, Microsoft Suite, OBS.

Languages Known: English(fluent), Hindi(Native)

LEADERSHIP AND RESPONSIBILITIES

CLUB MEMBER - Android Development Club

• Developed user interface for cross-platform CGPA calculator app using Flutter, incorporating student feedback

ACHIEVEMENT

• University finalist in Smart India Hackathon (SIH), selected from 200+ teams for innovative solutions.

CERTIFICATIONS AND WORKSHOPS

- CINE C-DAC Value-Added Workshop: Mastered ML algorithms, deployed ML pipelines, fine-tuned GPT-2, and accelerated code integration by 30% through Git workflows in a 30-hour workshop.
- IBM AI Engineering Specialization (view credential) | Coursera Issued by IBM Skills Network
- Machine Learning Specialization (view credential) | Coursera (Stanford University & DeepLearning AI)