

GenAI Project Details

There will be 2 mini projects and 2 major projects and for each concept we will be having a Real time Use Case scenario for better understanding of the Concept

Major Projects

Major Project 1: AI-Powered Profile Onboarder

Overview:

A Django-based Gen AI web app that automates resume parsing and onboarding for job seekers. Users upload PDF resumes, which are parsed using LLMs (OpenAI or LLaMA) to extract structured data. The system creates user accounts, calculates profile scores, and enables job applications.

Core Features:

- Resume parsing via Gen AI (PyMuPDF, Regex, LLM)
- Auto account creation & email notifications
- Profile status lifecycle (Created → Reviewed → Open to Work → Not Interested)
- Editable parsed profile dashboard
- Profile scoring system (0–100) with suggestions
- Job listing & application module
- Admin dashboard with filters & manual overrides
- Security (encrypted PII, role-based access)
- Tech Stack: Django, DRF, MySQL, Bootstrap/Tailwind, Celery, Redis

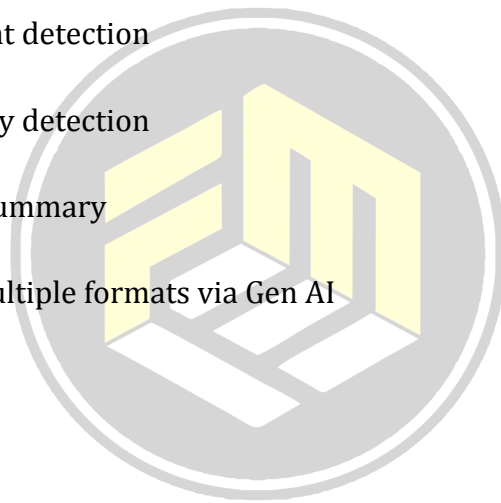
Major Project 2: AI-Driven Bank Statement Analyzer

Overview:

Automates financial data extraction from bank statements (PDF/scanned) using OCR and LLMs. Classifies transactions into categories, identifies recurring payments, and detects anomalies for lending, auditing, and financial analysis.

Core Features:

- OCR-based text extraction
- AI classification of transactions (salary, rent, utilities)
- Recurring payment detection
- Fraud and anomaly detection
- Financial health summary
- Adaptability to multiple formats via Gen AI



Mini Projects

Mini Project 1:

Project Title: CertiFlow: Autonomous Credential Intelligence Engine **Project Description:**

CertiFlow (or your chosen title) is a specialized Generative AI application designed to bridge the gap between unstructured physical/digital certifications and structured enterprise databases. Utilizing Multi-modal Large Language Models (LLMs), the application performs intelligent OCR and semantic understanding to accurately extract key metadata—such as institution names, completion dates, specific skill sets, and grades—from varied certificate formats.

Core Workflow:

1. Ingestion: Uploading batches of academic and professional certificates (PDF/Images).
2. Semantic Extraction: Using a Vision-capable LLM to "read" the context and map it to a predefined JSON schema.
3. Validation: Cross-referencing extracted data for consistency.
4. Database Integration: Automatically pushing refined reports into existing SQL/NoSQL tables to populate professional profiles or HR analytics dashboards.

Mini Project 2:

Project Title: MediVault AI: Intelligent Health Report Integration

Project Description: MediVault AI is a Generative AI-powered application designed to streamline the management of medical checkup reports. The system ingests health checkup package reports containing multiple test results for different patients, intelligently interprets the data, and automatically stores structured results into existing database tables. By leveraging Generative AI, MediVault AI not only extracts and organizes medical information with high accuracy but also ensures scalability for handling large volumes of reports. This project demonstrates how AI can bridge the gap between unstructured medical documents and structured healthcare databases, enabling faster insights, reducing manual effort, and laying the foundation for smarter healthcare analytics.

Key Highlights:

- Automated parsing of multi-test medical reports.
- Generative AI-driven data extraction and normalization.
- Seamless integration with existing healthcare database tables.
- Scalable design for real-world hospital or diagnostic center use cases.
- A practical showcase of AI in healthcare data management.