

NIRVED JAISWAL

CSE Undergraduate

Noida, India

nirved.in [✉ nirved@nirved.com](mailto:nirved@nirved.com) [in linkedin.com/in/nirvedjaiswal](https://www.linkedin.com/in/nirvedjaiswal) github.com/nirv3d [📞 +91-9312887755](tel:+919312887755)

Summary

Aspiring software and AI engineer passionate about building scalable and impactful systems across AI, automation, and real-time applications. Experienced in machine learning, backend engineering, NLP, and decision-driven systems with strong interests in problem solving and system design.

Education

B.Tech Computer Science

Graduating: 2027

Kalinga Institute of Industrial Technology, Bhubaneswar

CBSE Class XII - 90.2% | CBSE Class X - 90.8%

Aspam Scottish School, Noida

Projects

AI Product Manager Agent | Multi-Agent Generative AI System

- * Built a multi-agent Generative AI system that simulates Product Manager workflows including market research, feature prioritization, PRD generation, and strategic decision making.
- * Designed an end-to-end agentic pipeline where user inputs flow sequentially through Research → Analysis → Decision → PRD agents, enabling structured AI-driven product planning and reasoning.
- * Implemented tool-integrated AI workflows using web scraping, APIs, and data processing pipelines to gather market insights, analyze trends, and generate context-aware recommendations.
- * Engineered memory-enabled workflows using vector databases (FAISS/ChromaDB) and FastAPI backend services for contextual retrieval, persistent decision tracking, and scalable agent communication.
- * Deployed an interactive dashboard with live bounding boxes, color-coded risk indicators, and human-readable decision explanations.

Smart Driving Decision System using OpenCV, YOLOv8 | [🔗 Link](#)

- * Built an end-to-end real-time driving assistant that detects road objects via **YOLOv8**, estimates proximity using bounding box heuristics, and outputs STOP/SLOW DOWN/GO decisions through a risk scoring engine.
- * Engineered a multi-threaded **Flask** backend serving MJPEG video streams and REST endpoints, achieving smooth real-time inference without frame flickering.
- * Designed a **4 phase ML pipeline**: *object detection* → *context understanding* → *decision engine* → *natural language explanation generator* .
- * Integrated **FastAPI** as a standalone detection microservice, enabling any external client (mobile, web) to consume decisions via REST endpoints .
- * Deployed an interactive dashboard with live bounding boxes, color-coded risk indicators, and human-readable decision explanations.

FutSoul - AI Football Prediction System | [🔗 Link](#)

- * Built an NLP-powered football analytics system trained on 47,000+ international matches, capable of answering natural language queries about teams, predictions, and match outcomes.
- * Engineered and trained a model to generate match outcome probabilities using features such as recent form, historical performance, and home advantage.
- * Developed a custom NLP query understanding pipeline for intent detection, entity extraction, typo correction, and conversational input processing without relying on external LLM APIs.
- * Designed a keyboard-driven conversational interface enabling users to interact with predictive analytics models through natural language instead of structured commands.

Dynamic Pricing for Retail Stores (ongoing)

- * Designing a data-driven dynamic pricing framework for offline and online retail.
- * Analyzing economic viability, demand signals, inventory effects, and ML vs rule-based pricing.
- * Researched and reported on cost-benefit tradeoffs for retail adoption initiatives, leading to the development of a best-practice framework that can be used for future strategic projects.

Skills

Programming & Querying: Python, Java, JavaScript, C, C++, SQL

AI/ML & GenAI: TensorFlow, Scikit-learn, NLP, Agentic AI, Multi-Agent Systems, LangChain, LangGraph, Vector Databases, FAISS, ChromaDB, YOLOv8, Prompt Engineering

Frameworks & Tools: FastAPI, Flask, Streamlit, OpenCV, REST APIs, N8N

Data & Visualization: Power BI, Advanced MS Excel, matplotlib

CS Fundamentals: Operating Systems, Database Management Systems

Certifications

- **Building with the Claude API - Anthropic Academy** - Anthropic (2026)
- **Business Analytics for Decision Making - University of Colorado** - Coursera (2026)
- **Strategy and Game Theory for Management - IIM Ahmedabad** - Coursera(2026)

Extracurricular Recognition

- Selected as a **Featured Artist** in the Official **BeatStars Freshman Class of 2025**, highlighting standout talents within the global BeatStars creator community.

Hobbies & Interests

- Music Production (Proficient in FL Studio and CakeWalk)
- Football