# Vansh Chani

#### Education

#### Vellore Institute of Technology, Vellore

Aug 2023 - May 2027

B. Tech in Computer Science with specialization in AI/ML

o CGPA: 9.42/10.0

#### Police D.A.V. Public School, Ludhiana

Apr 2022 - May 2023

12th Standard, CBSE

• Percentage: 96.2%

#### Skills

Languages: C, C++, Java, Python, HTML, CSS, JavaScript, SQL

Frameworks: NumPy, Pandas, Matplotlib, Scikit - Learn, TensorFlow, Langchain, FastAPI

Tools: Git, VS Code, GitHub, Google Colab, IntelliJ

# **Projects**

#### PorTeX - LLM-Based Resume and Website Customization

 $In\ progress$ 

Developing PorTeX, a Chatbot based LaTeX resume and portfolio generating Agent, Implementing a RAG
Pipeline and developing MCP servers to generate highly customizable, high-ATS scored resumes.

#### Automated Dataset Integration and Preprocessing System

GitHub - Refyne.AI ☑

- Integrated Kaggle API and Gemini API to automatically search, aggregate, and preprocess similar datasets, expanding dataset size by an average of 40%.
- Implemented automated preprocessing using Simple and KNN imputers, Isolation Forest, based on skewness and correlation improving data completion by approx 20%.
- Applied Deep Feature Synthesis (DFS) using FeatureTools for automated feature engineering, generating an average of 20+ new features per dataset and improving regression task accuracy by approx 30%.
- o Tools Used: FeatureTools, Scikit-Learn, Kaggle API, Gemini API, Regex

#### Automated Exam Paper Tagging System

GitHub - Papers ☑

- o Developed an end-to-end pipeline for automatically tagging and detecting question papers for *Papers by CodeChef-VIT* (papers.codechefvit.com ♥) using Gemini 2.0 Flash model, enabling structured extraction of examination information and answer keys.
- Implemented a secondary pipeline to tag unstructured papers and seamlessly upload them to Cloudinary and MongoDB for storage and retrieval.
- Deployed and scaled the pipeline on AWS EC2, successfully processing 1500+ papers to improve accessibility and searchability.
- o Tech Stack: Next.js, TypeScript, Gemini API, AWS EC2

#### Semantic Book Recommender

GitHub - Recommender ☑

- Built a semantic book recommendation system for 7000+ books with 500+ categories that understands natural language queries using vector embeddings from Hugging Face Transformers.
- Integrated ChromaDB for efficient vector storage and retrieval, enabling fast similarity search and ranking.
- Applied sentiment analysis and zero-shot classification to cluster books into meaningful categories and improve recommendation quality.
- o Performed extensive EDA to uncover trends and tune model performance.
- o Frameworks: Python, Hugging Face Transformers, ChromaDB, Scikit-Learn

# Society and Organizational Roles

### Machine Learning Lead

 ${\it Code che f-VIT}$ 

 $VIT,\ Vellore \\ Sept\ 2023-Present$ 

- $\circ$  Developed multiple ML projects involving LLM fine-tuning, supervised and unsupervised learning, and NLP, and delivered two academic sessions to over 100 people.
- Spearheaded the end-to-end organization of CookOff 9.0, a flagship coding competition at graVITas'24, coordinating a team that facilitated the participation of over 500 students, achieving overwhelmingly positive feedback.

# **Achievements and Certifications**

Supervised Machine Learning: Regression and Classification	2024
DeepLearning.AI, Stanford Online (Certificate - Coursera)	
Oracle OCI 2025 Generative AI Professional (1Z0-1127-25).	2025 - 27
Oracle University (Certificate - Oracle)	
Oracle OCI 2025 Certified AI Foundations Associate (1Z0-1122-25).	2025 - 27
Oracle University (Certificate - Oracle)	
Academic Achievement: Ranked 2nd in branch out of 300 students.	2023 - 24
Oracle University VIT University, Vellore	