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

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 🗹

- 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.
- 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.
- 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

Codechef-VIT

 $VIT,\ Vellore$

Sept 2023 - Present

- 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

Oracle OCI 2025 Generative AI Professional (1Z0-1127-25)

2025 - 27

Achieved with 88% grade, demonstrating expertise in Oracle Cloud Infrastructure (OCI) Generative AI, LLM deployment, and prompt engineering.

Oracle OCI 2025 Certified AI Foundations Associate (1Z0-1122-25)

2025 - 27

Oracle University (Certificate - Oracle)

Earned with 93% grade, validating knowledge in AI fundamentals, machine learning workflows, data science practices, and Oracle AI services.

Supervised Machine Learning: Regression and Classification

2024

DeepLearning.AI, Stanford Online (Certificate - Coursera)

Completed with 100% grade, covering regression, classification, model evaluation, and feature engineering.

Academic Achievement: Ranked 2nd in branch out of 300 students

2023 - 24

VIT University, Vellore