Jinay Vora

Bachelor of Technology in Information and Communication Technology

202201473@dau.ac.in
linkedin.com/in/colewright22 github.com/Jinay-Vora123

Dhirubhai Ambani University
Technology
Formerly DA-IICT

Education

Dhirubhai Ambani University October 2022 – Present
Bachelor of Technology in Information and Communication Technology | *CPI: 6.16* *Gandhinagar, Gujarat, India*

MK Higher Secondary School (GHSEB) 2020 – 2022
Class XII | *72.31%* *Ahmedabad, Gujarat, India*

GLS Secondary School (GSEB) 2019 – 2020
Class X | *78.83%* *Ahmedabad, Gujarat, India*

Experience

Dhirubhai Ambani University May 2025 – July 2025
Summer Research Intern *Gandhinagar, Gujarat*

- **Conducted** research under Prof. Chhaya to enhance robustness, fairness, and interpretability in ML models via AIF360 bias-mitigation and LIME explainability frameworks.
- **Engineered** an XGBoost pipeline on a drugs dataset with IBM AI Fairness 360, applying bias-preprocessing, hyperparameter tuning, and benchmarking fairness-aware vs. fairness-unaware trade-offs.
- **Trained** a multi-task ResNet-18 on the FairFace dataset using a custom PyTorch loader, predicting gender and race and evaluating subgroup FPR/FNR fairness metrics.
- **Developed** baseline and fairness-aware BiLSTM classifiers on the Bias-in-Bios dataset with BERT embeddings and AIF360 Reweighing, visualizing accuracy-fairness trade-offs and confusion matrices.
- **Applied** CERTIFAI and the CFA frameworks to audit counterfactual explanations, optimize embedding distances, and improve SP, EO, REF and VEF fairness metrics across tabular, image, and text modalities.

Caypro May 2024 – June 2024
Python Intern *Ahmedabad, Gujarat*

- **Engineered** an LLM-driven quiz-generator prototype with n8n by orchestrating chat-trigger and AI Agent nodes (Groq llama-4-scout-17b) and leveraging MongoDB for extended context.
- **Applied** Chain-of-Thought reasoning and few-shot prompts to design exemplar Q&A templates, enhancing accuracy and consistency in automated quiz generation.
- **Refactored** Python codebases with Pandas/NumPy data pipelines, integrated scikit-learn and TensorFlow modules, and standardized code structure for reproducibility.
- **Built** predictive workflows using XGBoost and LSTM/CNN architectures, performing hyperparameter tuning, cross-validation, and RMSE/AUC performance evaluation.

Projects

Drilling Equipment Recommendation System | *Python, Pandas, NumPy, scikit-learn, XGBoost*

- Created a modular data-generation and preprocessing pipeline in Python (Pandas and NumPy) to synthesize realistic user–equipment interaction logs.
- Trained and tuned an XGBoost classifier to predict equipment success or failure under varied physical and environmental conditions.
- Implemented a cosine-similarity content-based recommender to suggest optimal equipment configurations, streamlining decision support.

Exploratory Data Analysis Project | *Python, Pandas, NumPy, Matplotlib, Seaborn, scikit-learn*

- Preprocessed the Variety commodity dataset by handling missing values, normalizing key features, and engineering time-series attributes.
- Conducted in-depth exploratory analysis with line plots, box plots, and correlation heatmaps to reveal seasonal patterns and inform feature selection.
- Built and compared regression models (Linear Regression, Random Forest, XGBoost) with hyperparameter tuning via cross-validation; top model achieved $R^2 > 0.80$.

Wanderways Website Chatbot | *Python, HuggingFace Transformers, BERT*

- Developed a context-aware chatbot using HuggingFace's `pipeline` with `bert-large-uncased-whole-word-masking-finetuned-squad` for question answering over site content.
- Engineered a two-stage retrieval flow: a keyword router (custom `query_keywords`) to select the relevant page section, followed by an LLM-driven QA pass over predefined `website_content`.
- Authored Python modules (`preprocess_query`, `keyword_search`, `get_relevant_link_llm`) to coordinate preprocessing, confidence thresholding, and graceful fallback logic.

Hospital Management Database | *PostgreSQL, ERD, DDL and DML Scripting*

- Designed and normalized a third-normal-form schema covering patients, doctors, appointments, treatments, and billing; produced ER diagrams and DDL scripts for 10+ tables with keys, constraints, and indexes.
- Authored DML scripts to ingest and validate 1,000+ sample records, and implemented complex SQL queries for appointment schedules, patient histories, billing summaries, and inventory audits.
- Documented database design, scripts, and query patterns to streamline future maintenance and onboarding.

Technical Skills

Languages:	C++, Python, SQL
Developer Tools:	n8n, Git, GitHub, VS Code, Linux Shell, Jupyter Notebook, Kaggle, PGAdmin
Frameworks:	Pandas, NumPy, PyTorch, scikit-learn, Matplotlib, Seaborn, Transformers, AI Fairness 360
Cloud & Databases:	PostgreSQL, MongoDB
Soft Skills:	Communication, Networking, Teamwork and Collaboration, Leadership, Time Management, Event Management
Coursework:	Deep Learning, Reinforcement Learning, Machine Learning, Exploratory Data Analysis, DSA, DBMS, Computer Networks, Verilog, MATLAB, AutoCAD
Areas of Interest:	AI/ML, Deep Learning, Natural Language Processing, Computer Vision

Positions of Responsibility

Quiz Club, DAU July 2024 – March 2025
Core Member *Gandhinagar, Gujarat*

- Organized campus Quiz Nights, the i.Fest Quiz and the Synapse Quiz; served as Quizmaster for multiple competitions.

IEEE Student Branch, DAU Jan 2023 – Jan 2024
Core Member *Gandhinagar, Gujarat*

- Co-organized the Annual Tech-Fest (i.Fest '23), the Robotics Event and the Technical Workshop alongside the IEEE student team.

Achievements

- Earned the **Machine Learning with Python – Level 1** certificate from IBM CognitiveClass.
- Earned the **Data Science Foundations – Level 2** certificate.
- Earned the **Applied Data Science with Python – Level 2** certificate.
- Completed the **Prompt Engineering** course.