# Prit Italiya

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# **Summary**

Junior data engineer with solid experience in developing predictive analytics models and optimizing ETL pipelines that enhance data visibility and processing efficiency. Successfully improved forecasting accuracy and supported strategic decision-making at previous internship. Eager to leverage expertise in data engineering and machine learning to contribute to achieving company goals at the target position.

#### **Skills**

- Data Analysis & Engineering: Data Cleaning, Wrangling, ETL, Data Integration, Statistical Analysis, Data Visualization, Data Pipelines, Data Analysis, Data Warehouse, Label Encoding, One-Hot Encoding, StandardScaler, MinMaxScaler
- Tools & Technologies: Scikit-Learn, Pandas, NumPy, Matplotlib, Seaborn, R, Excel, SQL, Google Data Studio
- Software Development: Object-Oriented Programming, Design Patterns, API Integration, Algorithms
- Programming Languages: Python, Java, JavaScript, C++, R, PHP, SQL
- Version Control & Databases: Git, GitHub, MySQL, Google BigQuery, PHPMyAdmin
- Cloud & Automation: Google Cloud (GCP), AWS (basic knowledge), Zapier Automation
- Machine Learning: Regression (Linear, Logistic), Classification (SVM, Decision Tree, Random Forest, KNN), Model Evaluation (Accuracy, Precision, Recall), Feature Engineering, Predictive Modeling, Feature Selection, Feature Extraction, Ensemble Learning, Perceptron, XGBoost, Hyperparameter Tuning, Model Persistence
- **Deep Learning & NLP**: Deep learning model development, neural network design, embedding generation, semantic search, document parsing, context-aware natural language processing, Retrieval Augmented Generation (RAG), model evaluation and benchmarking, text vectorization, prompt engineering, LLM orchestration
- AI Tools & Technologies: LangChain, Hugging Face Transformers, OpenAI GPT models, Google Gemini, Chroma DB, FAISS, Python (TensorFlow, Keras), AI API integration, vector database management, AI workflow automation, LLM Integration & Prompt Design, Agent framework design, Custom tool creation in LangChain

#### **Education**

University of Manitoba Jan 2024 - Dec 2026

B.Sc. (Honours), Computer Science (Statistics Minor)

International College of Manitoba Jan 2023 - Dec 2023

UTP Stage II, Science

Gujarat Technological University

Aug 2019 - Jul 2022

Diploma in Engineering, Information & Technology

## **Work Experience**

Naos Blockchain Capital Nov 2024 - Mar 2025

Data Engineering Intern

- Developed real-time business intelligence dashboards, improving data visibility for executives by 30%.
- Designed and optimized ETL pipelines using SQL, Python, and Google Cloud Products, reducing data processing time by 40%.
- Built predictive analytics models to support strategic decision-making, improving accuracy in forecasting by 25%.
- Managed version-controlled workflows using GitHub, streamlining collaboration among team members.

Esso Jan 2023 - Present

Cashier

- Handled daily cash, credit, and mobile payments with 100% accuracy while providing friendly and efficient customer service.
- Managed inventory restocking, pump monitoring, and store cleanliness to maintain smooth operations during high-traffic hours.
- Resolved customer inquiries and complaints professionally, contributing to increased customer satisfaction and repeat business.

#### **Volunteer & Leadership Experience**

#### Science Students' Association, University of Manitoba

Sep 2024 - Present

Peer Educator

- Conducted tutoring sessions for COMP 1010, COMP 1020, STAT 1150, and MATH 1240.
- Delivered 10+ hours of interactive academic support, leading to improved student performance and engagement.
- Improved comprehension in 80% of students (measured through feedback and quiz outcomes).
- Customized teaching approaches to meet diverse learning needs and collaborated with faculty for resource alignment.

#### **International College of Manitoba (ICM)**

Jan 2024 - Oct 2024

Peer Educator

- Provided tutoring and academic mentoring for 30+ students, focusing on foundational computing and mathematics.
- Conducted 50+ hours of one-on-one and group sessions, helping students transition smoothly into university-level expectations.
- Achieved 60%+ repeat attendance, highlighting effectiveness and value of sessions.

Reported 70% improvement in average grades among tutored students, confirmed through academic feedback and performance data.

#### **Projects**

## Quizzer: Python-based Interactive PDF Q&A System

Aug 2025

- Engineered an application enabling users to upload and interact with PDF documents through an AI-powered Q&A interface, integrating cutting-edge natural language processing with document parsing capabilities.
- Developed the core workflow using LangChain, vector embeddings (Chroma DB), and Google Gemini AI to support automated semantic search and context-aware answer generation from document content.
- Built and optimized the backend components for parsing, chunking, and embedding PDF content, ensuring accurate and efficient retrieval of relevant information in real-time queries.
- Focused on robust testing and modular design, establishing maintainable code and facilitating future enhancements of the system's capabilities.
- Collaborated independently through all stages of the project lifecycle, from ideation through to deployment and continuous improvement, ensuring a seamless and intuitive user experience.

#### Wealth Wise - Android Wealth Management App

Jan 2025 - Apr 2025

- Spearheaded the development of an Android application designed to assist users in tracking and managing their financial activities, emphasizing a clean and intuitive user interface.
- Played a pivotal role in implementing the application's core logic, including budget validation, category-based tracking, and goal-based projections.
- Led the testing efforts, achieving over 90% coverage across unit, integration, and acceptance tests, ensuring robust and reliable application performance.
- Embraced agile practices, participating in iterative development cycles, and adapting to feedback to enhance application features and user experience.
- Worked closely with a diverse team, fostering effective communication and coordination, which was instrumental in the project's success and turnaround from initial challenges to excellence.

## Personalized Movie Recommendation System

**Dec 2024** 

- Built a content-based recommendation system predicting user preferences with over 1,800 movie datasets.
- Used cosine similarity to enhance user-item matching, improving recommendation accuracy by 20%.
- Implemented data preprocessing and normalization (StandardScaler) to handle sparse data matrices efficiently.
- Optimized the system's recommendation pipeline, reducing query response time by 35%.

## Spam Email Detection System

Jun 2025

- Developed a spam email classifier using Multinomial Naive Bayes, achieving 99.56% accuracy on test data.
- Implemented text preprocessing and vectorization techniques, converting raw email content into numerical features.
- Created data visualizations including spam vs. non-spam email distribution and word cloud analysis to extract insights.
- Designed a machine learning pipeline integrating feature extraction and classification for streamlined predictions.
- Enabled custom email classification by allowing users to input email text files and receive instant predictions.

#### **College Website (Full-Stack Development)**

Nov 2021 - Jun 2022

- Led the development of a faculty management platform with real-time updates and MySQL integration.
- Designed secure user authentication and document-sharing features, improving collaboration by 50%.
- Iteratively improved website functionality based on user feedback, enhancing the user experience.