#### **JOMY MARY MATHEW**

Mumbai, Maharashtra | Phone number: 9136069972 | Email ID: jomymarymathew@gmail.com

Postgraduate in Data Science & Big Data Analytics with hands-on experience in AI/ML, Data Analysis, and Visualization, driven to deliver impactful, data-driven insights and solutions.

#### **EDUCATION**

#### M.Sc. DATA SCIENCE & BIG DATA ANALYTICS - CGPA: 9.97

August 2023 - July 2025

B.K. Birla College of Arts, Science & Commerce (Autonomous), Kalyan

#### **B.Sc. INFORMATION TECHNOLOGY – CGPA: 9.97**

August 2020 - April 2023

B.K. Birla College of Arts, Science & Commerce (Autonomous), Kalyan

#### **SKILLS**

Programming Languages: Python, SQL

Data Analysis & Visualization: Pandas, NumPy, Tableau, Microsoft Excel, Matplotlib, Seaborn

Machine Learning & Deep Learning: Scikit-Learn, TensorFlow, Keras, Classification, Clustering, Neural Networks

**AI/ML & Generative AI Tools:** LangChain, HuggingFace Transformers, RAG, LLMs, Vector Databases **Soft Skills:** Problem-Solving, Analytical Thinking, Communication skills, Team Work, Presentation Skills

### **INTERNSHIPS**

**Artificial Intelligence Developer Extern**, Smart Bridge Pvt. LTD - Smart Internz

Remote | March 2024 - May 2024

• Collaborated with a team of 3 in developing an automated **Eye disease detection system using deep learning**, implementing pre-processing techniques like **normalization**, **data augmentation**, **and resizing**. Built 4 models (CNN, Xception, Inception V3, VGG19), with the CNN model achieving 85% accuracy, and deployed the solution via a Flask-based web application.

#### **PROJECTS**

#### **Verdict AI – AI-Powered Legal Intelligence Platform**

Technologies Used: Python, NLP, RAG, LLMs (TinyLlama, Mistral), LangChain, FAISS, Hugging Face Transformers, Flask

Design and deployed a complete multi-module legal AI platform with: LLM-powered chatbot trained on IPC and Indian laws
using LangChain. Semantic case recommendation engine using FAISS and vector embeddings. Legal document summarizer
and multilingual translator with HuggingFace transformers. Integrated Retrieval-Augmented Generation (RAG) for accurate
and explainable query responses. Deployed via Flask interface on HuggingFace Spaces.

## **Transformer Based Semantic Book Recommendation System**

Technologies Used: Python, Hugging Face Sentence-Transformers, LangChain, ChromaDB, Gradio, Pandas, Hugging Face Spaces

Designed an interactive Semantic Book Recommendation on Hugging Face Spaces. Utilizes transformer-based sentence
embeddings (MiniLM, MPNet) with Chroma vector database for efficient semantic search. Features a Gradio-based UI with
embedding model selection, category and emotion filters, and dynamic top-K recommendation tuning.

#### **Fraud Detection Using Machine Learning**

Analyzed 6M+ financial transactions with only 0.13% fraud cases, performing data cleaning, feature engineering, and EDA to uncover fraud patterns. Applied SMOTE to handle class imbalance and built multiple ML models (Logistic Regression, Random Forest, XGBoost, LightGBM), evaluated using Precision, Recall, F1, and ROC-AUC.

# **CERTIFICATIONS**

- GOOGLE Data Analytics Professional Certification (Coursera)
- IBM: Enterprise Data Science in Practise | Getting started with Enterprise grade Al
- L&T EduTech: Machine Learning & Deep Learning

# **ACHIEVEMENTS**

- Ranked 1st in TY B.Sc. Information Technology at B.K. Birla College, Kalyan with a CGPA of 9.97/10.
- Actively participated in and successfully organized various intercollegiate quizzes and hackathons at both undergraduate and postgraduate levels.