

# Emy Mariya Biju

Developer

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## PROFILE

Skilled in Power BI, Tableau, Qlik Sense, Data Analytics, Data Science, and Machine Learning. Proficient in Exploratory Data Analysis and Inferential Statistics. Familiar with CNN, YOLO, Object Tracking techniques. Strong interest in AI-driven applications and data visualization solutions.

## EXPERTISE

- Total Experience: <1 year - Skills: Machine Learning, Generative AI, Deep Learning, Power BI, Tableau, Qlik Sense, Python, SQL - Tools: Jupyter Notebook, Google Colab

## PROJECTS

### **AI-Powered Fitness Chatbot | Python, LangChain, HuggingFace, ChromaDB**

Developed a domain-specific chatbot using Retrieval-Augmented Generation (RAG) to provide accurate fitness and diet recommendations. Implemented semantic search with sentence-transformer embeddings and ChromaDB for knowledge retrieval. Integrated HuggingFace FLAN-T5 model for context-aware natural language responses. Designed a modular CLI-based system optimized for research-level experimentation.

### **Accident Detection and Monitoring in Railway Tracks | Computer Vision, Python**

Built a system to analyze video streams, detect moving objects, and classify them as person or train to predict accidents. Utilized CNN and object detection models for real-time monitoring and alerting.

### **Wine Quality Prediction using Physicochemical Features | ML, Python**

Developed ML models to predict wine quality using physicochemical data. Performed data preprocessing, feature selection, and model evaluation using F1 score & ROC-AUC.

### **Interactive Sales Dashboard | Power BI, SQL**

Designed dashboards to track regional sales, profits, and KPIs. Implemented custom measures, drill-through, and filters for department-level insights.

## CERTIFICATIONS

DP-900: Microsoft Azure Data Fundamentals

## EDUCATION

B.Tech in Electronics and Communication Engineering

## TECH STACK

Python, SQL, Power BI, Tableau, Qlik Sense, LangChain, HuggingFace, Transformers, ChromaDB, Machine Learning, Deep Learning, Gen AI