Vinayak V Potty

Portfolio: https://vinayakvpotty.vercel.app/ Github: https://github.com/VINUVPOTTY Linkedin: www.linkedin.com/in/vinayak-potty

# Summary

Detail-oriented Data Analyst with a strong background in data visualization, statistical analysis, and business intelligence. Proficient in SQL, Python, and Tableau, with experience in extracting insights from complex datasets to drive data-driven decision-making. Skilled in data cleaning, predictive modeling, and dashboard creation to enhance business efficiency. Having a great deal of experience working with cross-functional teams to translate business needs into actionable insights.

### TECHNICAL SKILLS

- Programming Languages: Python, SQL, C++
- Web Technologies: HTML (Basic), CSS (Basic)
- Statistical Analysis & Machine Learning: Pandas, NumPy, Scikit-learn, TensorFlow, Regression Analysis, Classification Analysis, Predictive Modeling
- Deep Learning & Computer Vision: OpenCV (cv2), MediaPipe, TensorFlow, ANN, CNNs, Image Processing, Object Detection (YOLO)
- Generative AI & LLMs: Gemini, Ollama, RAG (Retrieval-Augmented Generation), Stable Diffusion
- ETL Tools: Pandas, NumPy, mySQL (Data Cleaning, Data Wrangling)
- Business Intelligence:: DAX (Power BI), Microsoft Excel (Power Query, Power Pivot)
- Data Visualization: : Power BI, Matplotlib, Seaborn, Excel (Charts, Pivot Tables)
- Version Control: Git, GitHub
- Soft Skills: Leadership, Writing, Public Speaking, Problem-Solving, Critical Thinking, Adaptability

#### EXPERIENCE

# Luminar Technolab

Data Science Intern

Kochi, Kerala Dec 2024 - Present

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Location: Kochi, Kerala

- Data Analysis and Visualization Performed exploratory data analysis (EDA) using Python, Pandas, and NumPy to extract insights from datasets.
- SQL Query Optimization Wrote and optimized SQL queries to manage and retrieve data efficiently from MySQL databases.
- Dashboard Development Developed interactive dashboards using Tableau and Power BI to visualize key performance metrics.
- Machine Learning Basics Gained exposure to machine learning models for predictive analytics and decision-making.

## PROJECTS

- Emotion-Aware Voice Chatbot with Whisper, Transformers, and Ollama: This project is a real-time, speech-driven chatbot that understands what you say and how you feel. It uses OpenAI's Whisper for speech-to-text, Hugging Face Transformers for emotion detection, and Ollama with LLaMA3 for generating emotionally intelligent responses.LINK
- Vehicle Detection Using YOLOv8 and Custom Dataset:Developed an object detection pipeline leveraging the YOLOv8 architecture to identify vehicles in images using a custom-labeled dataset.Python, YOLOv8, Ultralytics, OpenCV, TQDM. LINK
- Text Response Classifier Mental Health Screening Tool: Streamlit web app to classify free-text responses as *flagged* (indicative of emotional distress) or not\_flagged (neutral/safe). Used TF-IDF vectorization and a Decision Tree model for real-time classification. Tools: Streamlit, Python, Scikit-learn, NLTK, Joblib, HTML/CSS LINK
- Hand Free Mouse:Gesture-Based Mouse & Scroll Control Camera Input The script uses your webcam to continuously capture video frames in real time. LINK
- Power BI Project Cybersecurity Breach Analysis: Designed and developed an interactive Power BI dashboard to analyze cybersecurity breach incidents across branches, departments, and countries. The report enables stakeholders to uncover trends, assess duration of breach, and identify high-risk areas using visual insights.
- Global Water Quality and Public Health Risk Assessment Using SQL and Python: Analyzed a global dataset on water pollution and disease to identify regional disparities in water quality. LINK

## EDUCATION

• IHRD Kollam, India Post Graduation Diploma in Computer Application December 2014 – December 2015

Percentage: 83

• MG University Kottayam, India Bachelor of Electronics and Communication June 2011 - March 2014

## ACHIEVEMENTS

- Hacker Rank SQL Intermediate LINK
- $\bullet$  Career Essentials in Generative AI by Microsoft and Linked In  $\,$  LINK
- Python Basics LINK
- Generative AI LINK