

# VELLALA HARISH

## Skills

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- **Machine Learning:** Logistic Regression, Random Forest, Gradient Boosting, Decision Tree Learning, Artificial Neural Networks, Naive Bayes, KNN, K-Means Clustering, Principal Component Analysis (PCA), Singular Value Decomposition (SVD), scikit-learn, FastAPI, CI/CD, GCP basics, Monitoring.
- **Deep Learning:** TensorFlow, PyTorch, Keras
- **Python** (Pandas, NumPy, SciPy, Matplotlib)
- **Excel** (VLOOKUP, Conditional Formatting, Pivot Tables)
- **Data Visualization:** Tableau, Power BI, Matplotlib, Seaborn
- **Natural Language Processing:** NLTK, transformers

## Projects

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### Diagnosis of Multiple Diseases using Machine Learning

- Built a **machine learning model** to predict the occurrence of multiple diseases such as **diabetes, heart disease, and cancer** based on patient health records.
- Conducted **Exploratory Data Analysis (EDA)** and **feature engineering** to extract relevant features from the data.
- Used various machine learning algorithms such as **Logistic Regression, Random Forest, and Gradient Boosting** to train the model and evaluated their performance.
- Achieved an accuracy of **90%** on the test dataset.

### Sales Report and Forecasting Project using Power BI

- Led a sales report and **forecasting project using Power BI**, aiming to improve decision-making and **optimize business outcomes**.
- **Gathered and cleaned relevant sales data**, designed an **interactive Power BI dashboard**, and implemented a robust forecasting model.
- The project resulted in **increased accuracy in sales forecasting**. Built an interactive dashboard with custom filters.

### Driver Drowsiness Detection using Media Pipe

- **Trained a deep learning model using Media Pipe** Holistic model to extract pose, face, and hand landmarks from the input video footage, deployed as a lightweight inference service.
- Built a real-time driver drowsiness detection model using MediaPipe + OpenCV, achieving 85% accuracy with latency <100ms.
- Achieved an **accuracy of 85%** on the test dataset and improved the performance using techniques such as data augmentation and hyperparameter tuning.

## Work Experience

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**Logy.AI collaborates with doctors from US, Kenya, Singapore and India to build AI-powered healthcare products for big brands like Colgate, Apollo and VLCC.**

Since Mar 2024

- Played a key role in **development of AI powered dental screening applications**.
- Played a key role **Developing a prototype for Cataract prediction**.
- Implemented smart healthcare chatbots for clients like **Apollo Dental and Colgate Nigeria. Integrated ChatGPT API and Lang chain** for context-aware responses, strengthening chatbot capabilities through data science and machine learning. Collaborated with clinical teams to fine-tune threshold values for best output,

## Education

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**MASTER OF SCIENCE IN DATA SCIENCE** –Vellore institute of technology(VIT) – Vellore 2022-2024

**Bachelor of Science IN M.P.C'S(MATHEMATICS PHYSICS AND COMPUTER SCIENCE )**

2018-2021

- St. Joseph's Degree and PG College – Hyderabad

## Achievements

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- Student of 30Days of Google Cloud for our campus and Student of Google Cloud Ready Program.
- Soft skills in T.I.M.E.S.
- Data Visualization and communication with Tableau from Coursera.
- IBM data analyst course from Coursera.
- IBM data scientist course from Coursera.