

# **Master Resume**

## **1)Personal Information :**

**Full Name :** Byri Babaji

**Email id :** [byribabajimudhiraj@gmail.com](mailto:byribabajimudhiraj@gmail.com)

**Phone Number :** 9618485239 , 8340028690

**LinkedIn Profile :** [www.linkedin.com/in/babajimudhiraj](https://www.linkedin.com/in/babajimudhiraj)

**GitHub:** <https://github.com/Babaji-B> ,

**Address :** 25/5 Indiramma Colony ,  
Bahadurpally Village ,  
Medchal (Dist), Hyderabad ,Telanagana – 500043

## **2)Career Objective / Summary :**

I started my journey as a Mechanical Engineering graduate, but my curiosity for data-driven decision-making and automation led me to explore data science. Over time, I developed skills in Python, SQL, data analytics, machine learning, Deep Learning and NLP, which allowed me to transition into the field. During my internship at ProITBridge, I worked on real-world data problems, optimizing pricing compliance and automating data processing workflows. I gained hands-on experience by doing projects in my each stage of learning, and I continue to refine my expertise in building scalable data solutions. My goal is to leverage data science and machine learning to solve business challenges and drive impactful insights..

## **3) Key Skills :**

**Languages:** Python, SQL

**Technologies/Frameworks:** TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Streamlit, BeautifulSoup, Selenium

**Developer Tools:** VS Code, Jupyter Notebook, Google Colab

**Version Control:** Git (GitHub for repository hosting)

**Soft Skills :** Problem-Solving, Analytical Thinking, Communication, Team Collaboration, Time Management

## **4) Work Experience :**

**Job Title:** Data Scientist Intern

**Company:** ProITBridge PVT LTD, Bangalore

**Duration :** DEC – 2024 to Present

## **Key Responsibilities and Achievements:**

- Developed a SQL-driven price monitoring system using Python, MySQL, and APIs to track price violations across marketplaces. Implemented dynamic query-based processing and real-time exchange rate conversion, enabling accurate violation detection and tracking.
- Designed a Quality Check System integrating the YOLO object detection model for automated defect detection in metal plates.
- Built a resume classification system using a large language model (LLM) to extract skills and classify resumes according to skill set, reducing manual HR screening time by 40%.
- Engineered and fine-tuned machine learning models for tasks such as classification, regression, clustering, and recommendation systems, enhancing model accuracy through feature selection and hyperparameter tuning.
- Performed feature engineering on raw datasets, identifying key attributes that enhanced model performance and predictive accuracy.

## **5)Education :**

**Degree :** Btech in Mechanical Engineering

**Institution :** St.Martin's Engineering College

**Year of Passing :** 2024

**Grade / Percentage :** 8.2 CGPA

**Diploma :** Diploma in Mechanical Engineering

**Institution :** Slc's Polytechnic college

**Year of Passing :** 2021

**Grade / Percentage :** 9.5 CGPA

**School :** SSC [ 10<sup>th</sup> ]

**Institution :** ZPHS Narayankhed

**Year of Passing :** 2018

**Grade / Percentage :** 8.7 CGPA

## **6)Certifications :**

**Course name :** Introduction to Career Skills in Data Analytics

**Issued by :** Linkedin Learning

**Completion Date :** Jan 2025

**Course Name : 1-Day AI Tools Workshop**

**Issued by : Be10x**

**Completion Date : Dec 2023**

**Course Name : Basics of Python**

**Issued by : Infosys Springboard**

**Completion Date : Nov 2023**

**Other Certificates :**

- 1) Certificate for Presenting Paper on “Design of Intelligence Autonomous six leg Robot” in 3<sup>rd</sup> international conference on “Recent advances in Mechanical Engineering”  
**Organised by : St. Martin’s Engineering College , Dhulapally ,Secundrabad**

## **7)Projects :**

### **Project 1 : Minimum Advertised Price Monitoring system using Python and SQL**

Designed a dynamic SQL-based system to process seller data, compare advertised prices with threshold values and store violations in a monitoring table.

- Implemented real-time exchange rate conversion to handle regional pricing using API integration and caching techniques.
- Developed a rule-based violation detection mechanism: If a seller’s advertised price falls below the Minimum Advertised Price (MAP) set by the product owner or brand owner, it is flagged as a violation.
- Identified fraudulent sellers using alias names, fake store names, and multiple marketplace accounts to bypass MAP policies.
- Optimized data handling by dynamically selecting seller tables based on input dates, improving tracking efficiency • Aggregated violations per Region and Subcategory, enabling early detection of high-risk sellers and ensuring effective policy enforcement.

### **Project 2 : Multi Media Recommendation Engine**

- Gained hands-on experience in web scraping by using the requests module to gather data directly from online sources, ensuring efficient and reliable data extraction.
- Applied Exploratory Data Analysis (EDA) techniques to clean, filter, and structure raw, unorganized data, transforming it into a format suitable for machine learning.
- Built a content-based recommendation system using TF-IDF vectorization and a linear kernel, successfully matching users with relevant content based on textual similarity.
- Verified the effectiveness of the system by thoroughly testing each step—from data scraping to model creation

### **Project 3 : Holes Detection using Yolov5**

- Build a computer vision solution for industrial defect detection using YOLO object detection, focusing on real-time processing.
- Curated and annotated a custom data and increased the size of data by using augmentation techniques to train and validate the model, emphasizing robustness in varying lighting and material conditions.
- Optimized pre-processing techniques to boost model performance and exported results in JSON format

### **Project 4 : Resume Classification Using LLM (Gemini Model)**

- Developed a Resume Classification System utilizing a Large Language Model (LLM) to extract skills and classify resumes based on skill sets, reducing manual HR screening time by 40 .
- Extracted text, data cleaning, EDA, and visualization to improve classification accuracy.
- Applied NLP techniques like tokenization, lemmatization, and POS tagging for preprocessing.
- Developed an interactive Streamlit-based UI for resume classification.

### **Project 5 : Telecom Customer Churn Prediction**

- Analyzed telecom customer data using EDA techniques to identify key churn indicators such as contract type, service usage, tenure, and payment method, enabling strategic feature selection for predictive modeling.
- Engineered meaningful features and applied data preprocessing steps including encoding, scaling, and handling of missing values to ensure a clean and model-ready dataset.
- Built and evaluated multiple classification models (Logistic Regression, Random Forest, XGBoost), with the best-performing model achieving over 85% accuracy and a high F1 score for churn prediction.
- Interpreted model outputs to generate actionable business insights, helping identify high-risk customer segments and supporting churn reduction strategies through targeted interventions.

### **Project 6 : Customer Segmentation using Kmeans Clustering**

- Performed customer segmentation using KMeans clustering, grouping customers based on demographics and spending behavior for targeted marketing strategies.
- Applied EDA to explore customer trends and cleaned, normalized data to prepare it for unsupervised learning.
- Identified the optimal number of clusters using the Elbow Method and Silhouette Analysis, improving segmentation quality.
- Visualized clusters using PCA and t-SNE, enabling clear interpretation of customer groups and supporting data-driven business decisions.

### **Project 7 : Fraud Detection Using Autoencoders**

- Developed an Autoencoder-based fraud detection model to identify fraudulent credit card transactions.
- Trained a deep learning model to learn normal transaction patterns and detect anomalies.
- Used Mean Squared Error (MSE) reconstruction loss to flag suspicious transactions.
- Achieved high recall and precision in detecting fraudulent activities.
- Evaluated the model using AUC-ROC, precision, recall, and F1 score for accurate fraud detection.

## **Project 8 : Building Smart Parking & Surveillance AI Model using YOLO – V8**

- Developed a real-time vehicle detection system using YOLOv8 to monitor parking lot occupancy through camera feeds.
- Trained a custom object detection model on PKLot/CARPK datasets using Roboflow and fine-tuned hyperparameters for optimal performance.
- Implemented parking slot detection logic using OpenCV's pointPolygonTest, comparing vehicle bounding boxes against predefined polygonal slot coordinates.
- Converted the YOLOv8 model to TFLite format and integrated it into a mobile application for on-device inference and smart parking visualization.

## **8)Achievements and Awards :**

- Secured First Position in Kabbadi and Runner's up in Volleyball out of 15 Teams as part of Annual sports week in 2020
- Academic Topper Award in my Diploma Second Year
- Academic Topper Award in my Btech Third Year

## **9)Languages Know :**

- English
- Hindi
- Telugu

## **10)Interests :**

Playing Volleyball

Content Creating in Social Media

Teaching