

## About Vijay Takbhate

Hi, I'm Vijay Takbhate!

Welcome to my GitHub! I'm Vijay Takbhate, a passionate Machine Learning and AI enthusiast with a strong foundation in mathematics and its real-world applications.

### About Me:

I specialize in turning data into insights and thrive on solving complex problems with innovative solutions.

Certified MLOps Expert, with expertise in deploying and managing machine learning models in production environments.

Passionate about cutting-edge topics like Large Language Models (LLMs), fine-tuning, and Retrieval-Augmented Generation (RAG).

### What I Do:

Machine Learning & AI: Developing algorithms, models, and systems to solve real-world challenges using data.

MLOps: Automating and optimizing the deployment of machine learning models in production.

LLMs & Fine-Tuning: Working with large-scale models to create intelligent, adaptable systems.

RAG: Exploring innovative approaches to enhance model performance through Retrieval-Augmented Generation techniques.

## Companies I Worked With

### 1. Fox Solutions Pvt. Ltd.

- Role: Automation Engineer
- Duration: Jun 2024 - Oct 2024

### 2. Cei Design Consultancy Pvt. Ltd.

- Role: Python Developer Intern
- Duration: Aug 2024 - Sept 2024

### 3. Ujucode

- Role: Subject Matter Expert Intern
- Duration: Aug 2023 - Oct 2023

Total Experience: 8 months

## Projects Created by Vijay

### Skills/Technologies Used:

- PySpark, SQL, NLP, Google Cloud Storage, MySQL
- Flask, Streamlit, MediaPipe, Docker, Databricks

### Project Summaries:

1. Twitter Post Sentiment Prediction: Engineered an ETL pipeline using PySpark and SQL for sentiment analysis.
2. Text-Text Chat-Bot: Advanced chatbot with features like paraphrasing and grammar correction.
3. Hand Gesture Recognition: Streamlit app for gesture detection with custom datasets.

## Featured Kaggle Notebooks

### 1. Healthy Fast Foods: KMeans and Visualization

- Description: Clustering fast foods based on calories to identify healthier options.
- Achievements: (Bronze Medal) | 4,604 (Views)

### 2. Cancer Prediction with 98% Accuracy

- Description: Image processing and CNN model to predict cancer with high accuracy.
- Achievements: (Bronze Medal) | 1,621 (Views)

### 3. Pneumonia Detection with CNN and ML with 98% Accuracy

- Description: X-ray image-based CNN model for pneumonia detection.
- Achievements: (Bronze Medal) | 2,000 (Views)

### 4. Stress Identification: NLP with Best Prediction

- Description: NLP project covering EDA, text processing, TF-IDF, and model training.
- Achievements: (Bronze Medal) | 2,710 (Views)

### 5. Activity Monitoring System Prediction - EDA

- Description: Explored imbalanced dataset techniques for elder activity tracking.
- Achievements: (Bronze Medal) | 680 (Views)