# **Deepfake Detector Application**

# This web application is designed to detect whether an image is AI-generated or human work. It utilizes a deep learning model trained on a dataset of Ai Art and Real Art images.

## **Model**

The trained model used for image classification is stored in the **my\_best\_model\_fastai.pkl** file. This model was trained on ResNet50, adopting the Fastai library and achieved high accuracy in detecting deepfake art images.

**Requirements**

To run the web application, you need to have the following dependencies installed. You can install them using the provided requirements.txt file in the directory.

“pip install -r requirements.txt”

## **Running the Web Application**

1. Copy the complete code file to your local computer.
2. Open terminal on preferred IDE( VScode recommended) and navigate to the image detector web\_app directory:
3. Create a new virtual environment and activate it:

“python3 -m venv myenv”

Then;

“source myenv/bin/activate”

1. Run the streamlit application:

“streamlit run app.py”

1. Your web browser will automatically open to the local host to access the web application.

## **Usage**

* To upload an image using the provided format (.jpg, .jpeg, .png, .gif, .webp).
* Click the "Upload" button to classify the loaded image.
* The result will display whether the image is AI (Artificial Intelligence) generated or Real, with a confidence level.