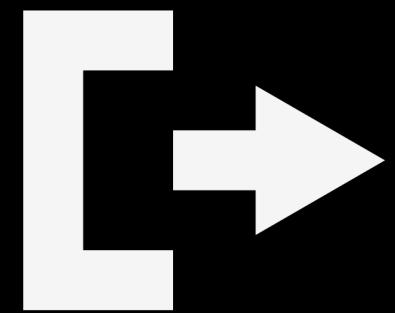
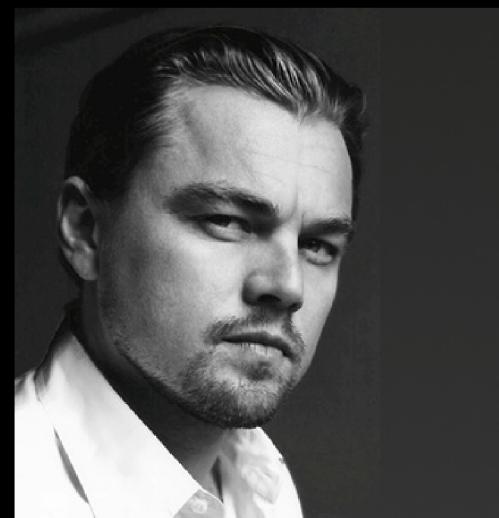


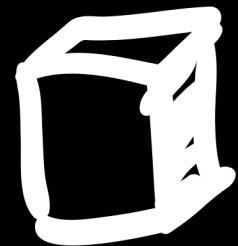
CELEBRITY IMAGE CLASSIFIER



PROJECT OBJECTIVE



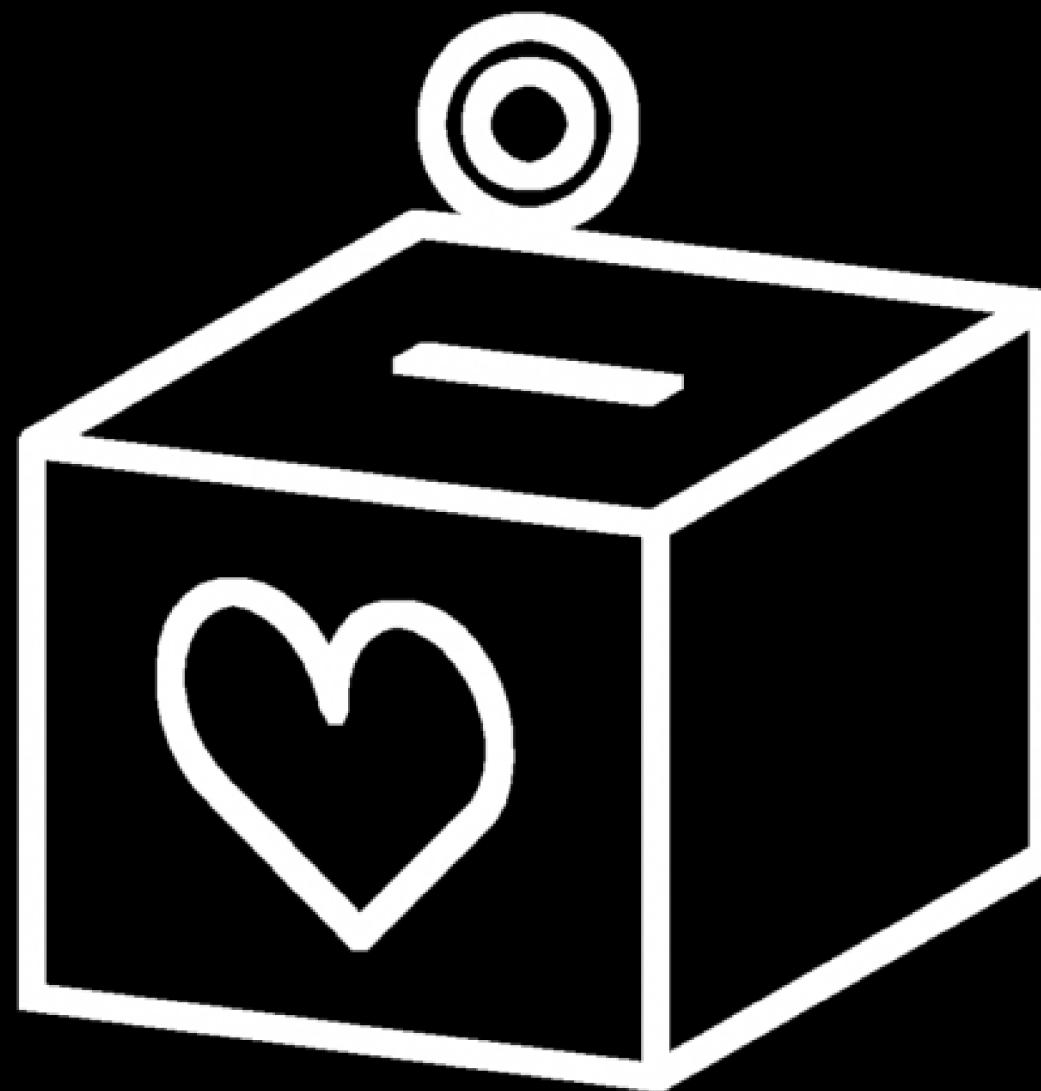
**Why simple Classification
not Neural nets!!**





ROAD MAP

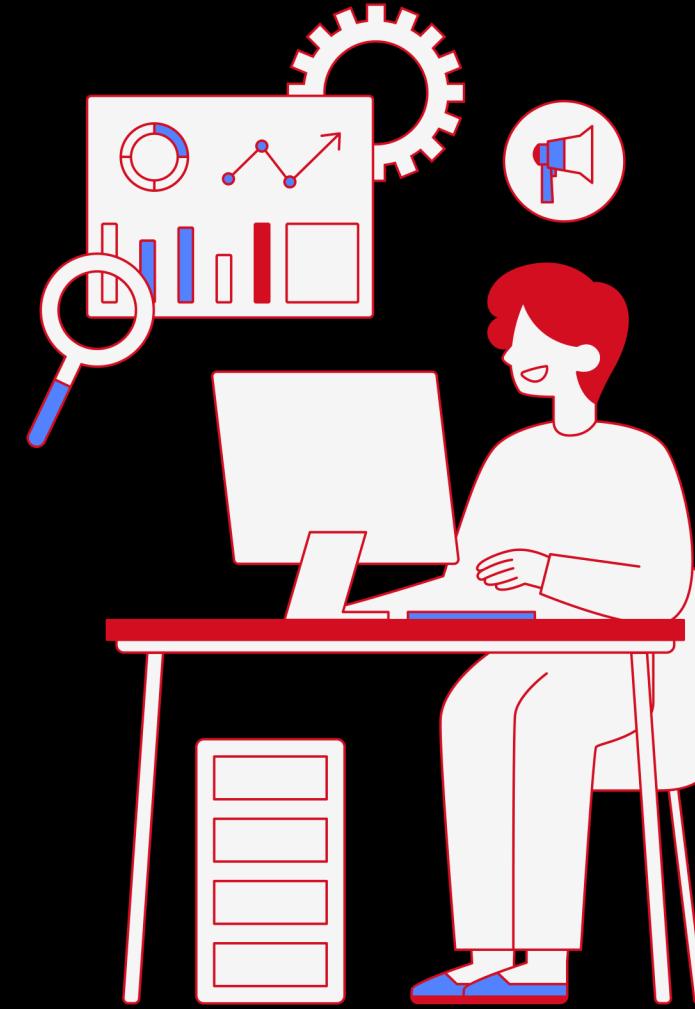
- ✓ Data Collection
- ✓ Data Cleaning
- ✓ Feature Engineering
- ✓ Model training
- ✓ UI Creation
- ✓ Pros YET Cons



DATA COLLECTION

DATA COLLECTION

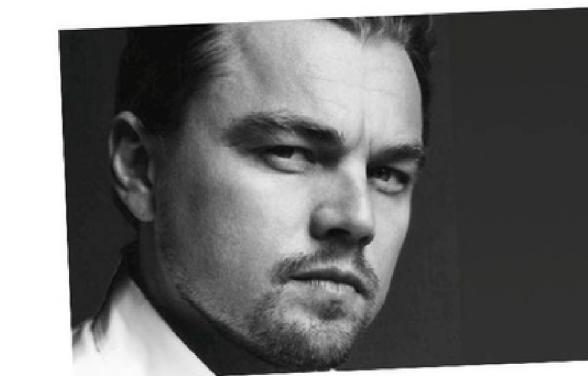
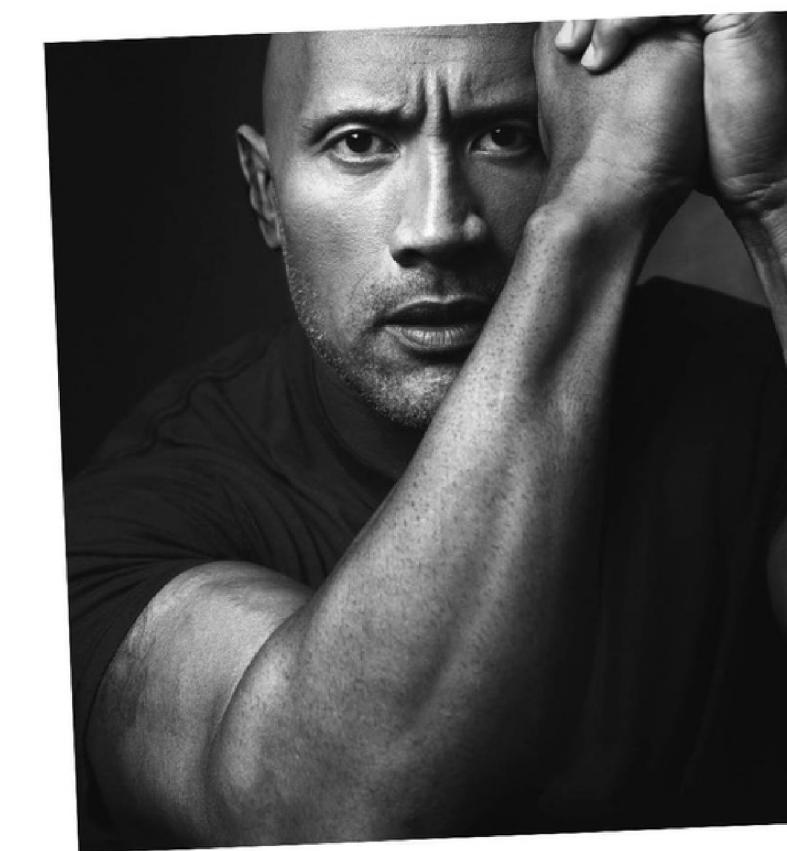
- Manual approach for data collection.
- Downloaded images by using the free Chrome extension.
- Limiting collection of **50 to 80** images per celebrity.



DATA CLEANING

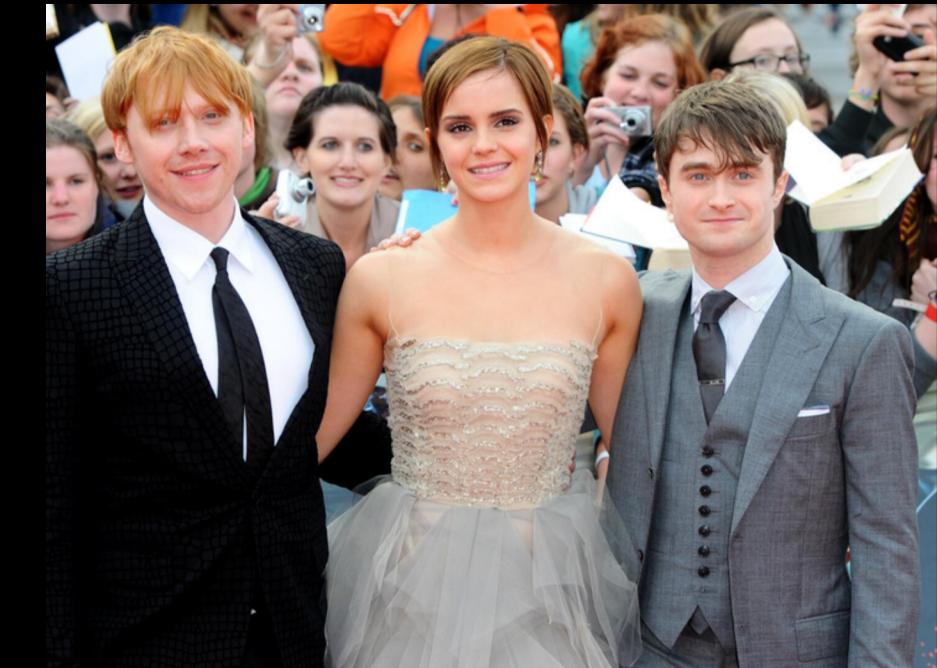
IMAGE DIRECTORY

MY CHOSEN 5



- Only keeping the images with relevant extensions like **JPG**, **PNG**, and **JPEG**.

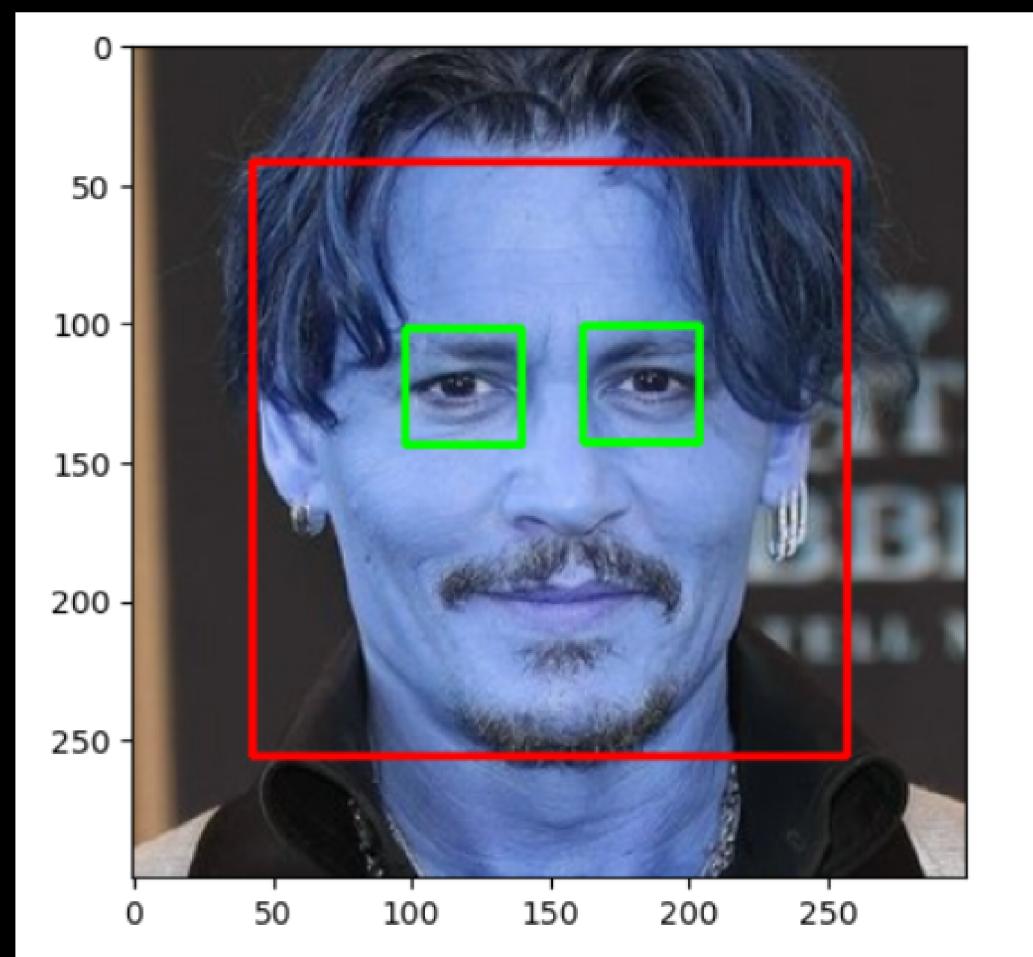
- Deleting Irrelevant Images like 



Open CV & Haarcascade



original image



CV2, Haarcascade

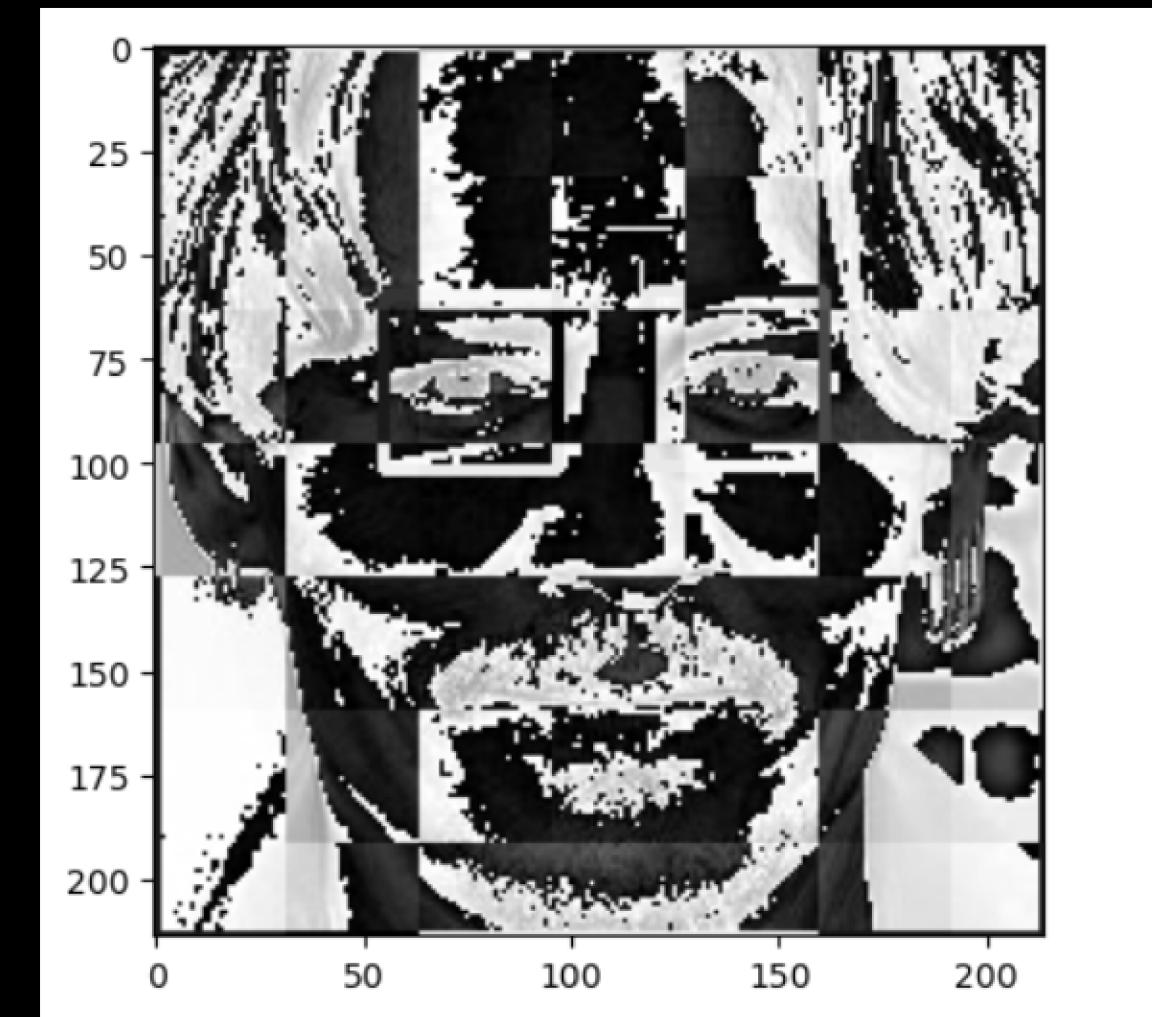
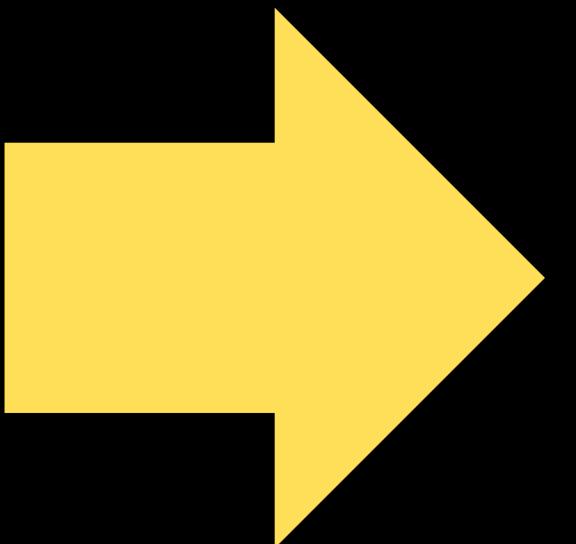


cropped image



FEATURE ENGINEERING

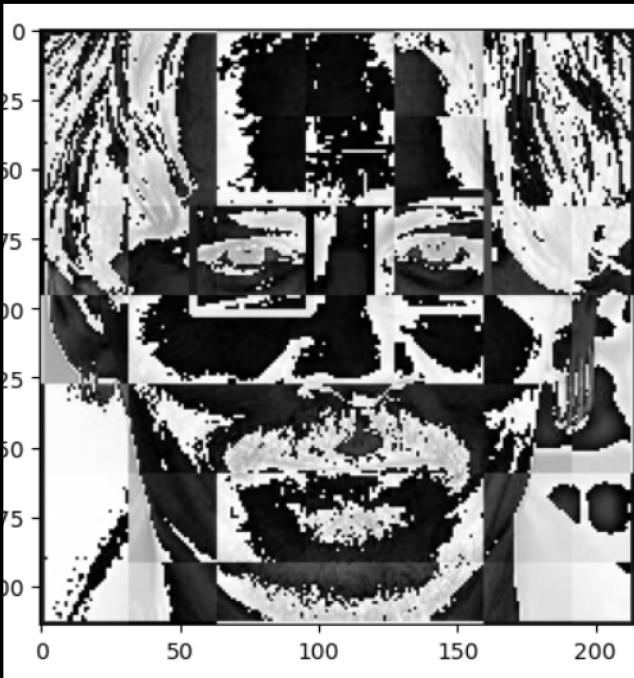
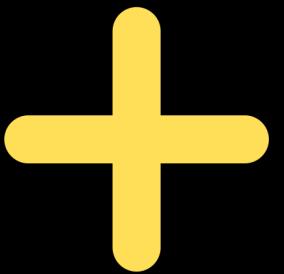
WAVELENGTH TRANSFORMATION



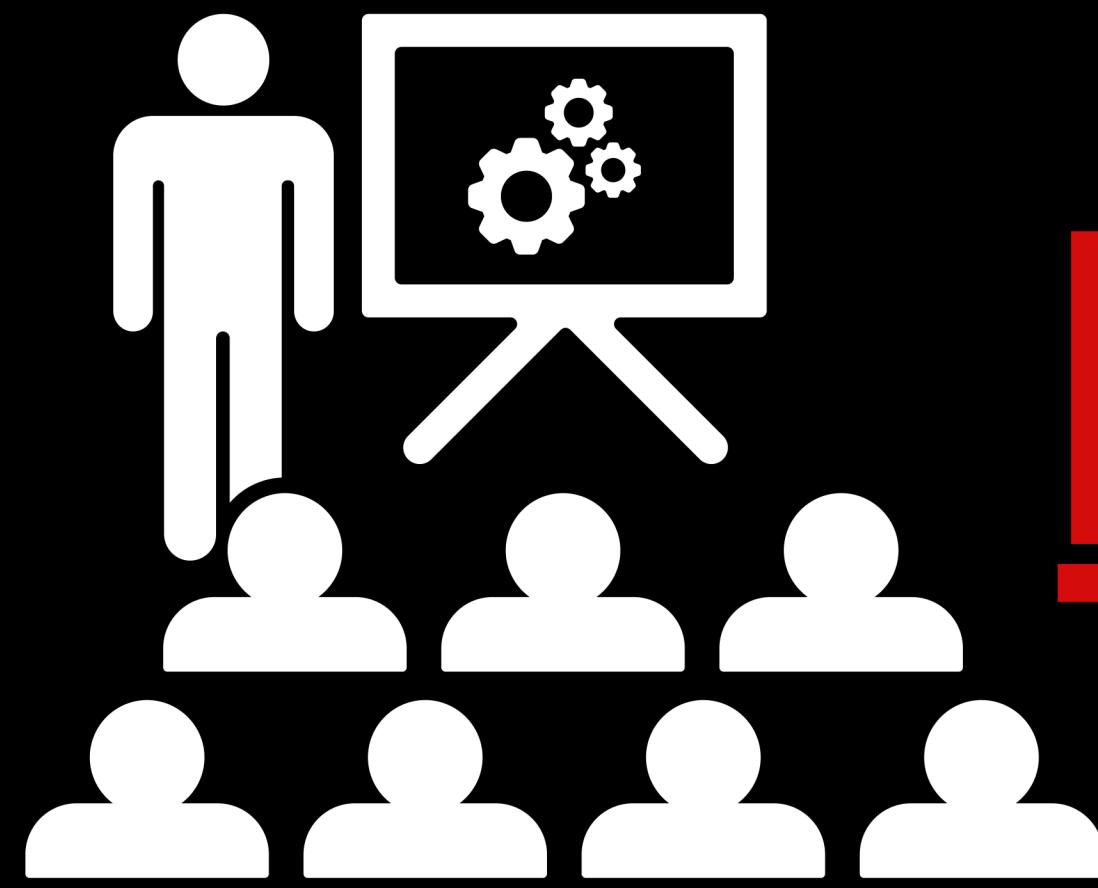
cropped image

Wavelength-transformation

Getting X Ready



Combined image



MODEL TRAINING

Model Training with a Pipeline:

- Data scaling using StandardScaler and an SVM classifier (SVC)

Model Selection with Hyperparameter Tuning:

- (SVM, Random Forest, and Logistic Regression)

Model Evaluation:

- The accuracy score for each of the best models and Logistic_regression gave the best score of 0.8528169014084507.

UI Creation

**STREAMLIT
APP**

Celebrity Image Classifier

localhost:8501

Deploy

Choose any of the following celeb Image to upload

Upload an image to classify the celebrity

Drag and drop file here
Limit 200MB per file • JPG, JPEG, PNG

Browse files

240523-lady-gaga-dusty-rose-manicure-cannes-GettyImages-1384883467.jpg 125.3KB X

Uploaded Image

Predicted Celebrity: ladygaga

Confidence: 99.41%

PROS YET CONS

- **Image Classification based on traditional machine learning techniques, can be time-consuming.**
- **Downloading free images manually from Google sometimes compromises the quality of datasets.**
- **Rough-quality data sets create hurdles in Model performance.**

TROUBLE MAKERS



THANK YOU

