**PSC Project: Signature Similarity using OpenCV**

**Project Description**

Project to detect the similarity of two signatures.

This Application helps mathematically evaluate similarity of two signatures. Simply capture or upload the picture of both signatures to be compared. Both the images will be displayed on the screen that are being compared. The popup will show the percentage match of the signatures. The signatures are compared using structural\_similarity in skimage.metrics package. This project can be used in various applications such as signature verification, document authentication, and forensic analysis.

**Features**

The main features of this project are:

Compare two signatures and determine the level of similarity between them.

Display the results in terms of percentage similarity.

Ability to handle different types of signature images such as JPG, JPEG and PNG.

**Prerequisites**

1. Python >=3.6
2. OpenCV
3. Scipy==1.7.2
4. Scikit-image
5. matplotlib==3.4.3
6. opencv-python==4.5.4.58
7. numpy==1.21.4
8. opencv-python==4.5.4.58
9. scikit-image==0.18.3

**Run**

1. pip install code for installing above packages

Ex- To install OpenCV, you can use the following commands:

pip install opencv-python

1. python main.py

**Input and Output**

**Input**

The input to this project is two signature images that need to be compared. The input images can be in any of the following formats:

JPG

JPEG

PNG

**Output**

The output of this project is the level of similarity between the two input images displayed in percentage.

**Team Details**

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