**Software Engineering**

**Term Project: Image similarity search Engine**

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**Introduction:**

This project aims to build a image similarity search engine. In general, we can accomplish this in two ways:

* The first method is to use locality sensitive hashing.
* The second method is to use algorithms such as Mean Squared Error (MSE) or the Structural Similarity Index (SSIM).

In this project we will use Python to compare two images using Mean Squared Error and Structural Similarity index.

**Clear Statement of the problem:**

The purpose of this project is to compare the images for multiple purposes for example to identify, to enhance the quality of image Using SimpleCV Libraries In Python.

**Objective and Scope:**

The main objective of this project is to make a python

image search engine and it will helps to locate different images, and to compare the images wether they are fake or real i.e. cards e.t.c

**Project Plan**The project will be divided into small modules. These modules will be tested  
one by one. After test process, these modules will be integrated into one complete system.

**Resources Required**The list of required resources for this project are following:

***OpenCV and Python versions:******Python 2.7/Python 3.4+****and****OpenCV 2.4.X/OpenCV 3.0+***

**References:**

<https://www.udemy.com/python-machine-learning-projects/>

<https://www.pyimagesearch.com/2014/09/15/python-compare-two-images/>

<https://pythonformachinelearning.wordpress.com/2014/08/15/your-very-own-personalised-image-search-using-python/>