# Face Recognition using One-Shot learning technique and Siamese Network

Installation of Dependencies

**Install tensorflow Deep Learning Library**

pip install tensorflow

!pip install tensorflow==2.5.0 tensorflow-gpu==2.5.1

**Image processing**

opencv-python matplotlib

!pip install matplotlib

**Import standard dependencies**

import cv2

import os

import random

import numpy as np

from matplotlib import pyplot as plt

**Import tensorflow dependencies - Functional API 3most important classes are Model, Input, Flatten**

from tensorflow.keras.models import Model

from tensorflow.keras.layers import Layer, Conv2D, Dense, MaxPooling2D, Input, Flatten

import tensorflow as tf

Model(inputs=[inputimage, verificationimage], outputs=[1,0])

Input(shape=)

**GPU memory usages reducer ( len(gpus) )**

gpus = tf.config.experimental.list\_physical\_devices('GPU')

for gpu in gpus:

tf.config.experimental.set\_memory\_growth(gpu, True)

**Set GPU Growth**