

Step 0 Import Required Packages

```
In [27]: import numpy as np
import scipy.io
import sklearn.metrics
import sklearn
import os
import random
import pandas as pd
import time
from sklearn.model_selection import train_test_split, GridSearchCV
from sklearn.ensemble import GradientBoostingClassifier
from sklearn.metrics import classification_report, confusion_matrix, roc_auc_score
import pickle
from sklearn.preprocessing import StandardScaler
from keras import Sequential
from keras.layers import Dense, Activation, Flatten, Input, Dropout, BatchNormalization
from keras.models import Model
from keras import initializers
from keras.optimizers import Adam
import matplotlib.pyplot as plt
import tensorflow as tf
```

Step 1 Read The Files

```
In [2]: # When using Colab, you can upload train_set.zip in the content folder and run this kernel.
# !unzip -qq /content/train_set.zip
```

```
In [28]: # Set your directory to read the data, default is the directory in colab.
unzipped_folder_path = 'C:/Users/wannian/Desktop/face/train_set'
```