

Classification Gender Project Description

Introduction:

A gender classification system uses face of a person from a given image to tell the gender (male/female) of the given person. this can be carried through ML classification models such as KNN and Cross validation to classify the gender by the face sizes.

Datasets:

- The Dataset used is taken from “www.Kaggle.com”
- longhair - This column contains 0's and 1's where 1 is "long hair" and 0 is "not long hair".
- foreheadwidthcm - This column is in CM's. This is the width of the forehead.
- foreheadheightcm - This is the height of the forehead and it's in Cm's.
- nosewide - This column contains 0's and 1's where 1 is "wide nose" and 0 is "not wide nose".
- noselong - This column contains 0's and 1's where 1 is "Long nose" and 0 is "not long nose".
- lipsthin - This column contains 0's and 1's where 1 represents the "thin lips" while 0 is "Not thin lips".
- distancenose toplong - This column contains 0's and 1's where 1 represents the "long distance between nose and lips" while 0 is "short distance between nose and lips".
- gender - This is either "Male" or "Female".

Modeling:

- After splitting data to train and test I used KNN to classify and I get accuracy of 96.2%
- Using Cross Validation, the best neighbor is 26 with Accuracy of 97.4%