



INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER (UOW)

BEng/BEng.(Hons) in Software Engineering

Final year Project 2017/2018

**“Remake the presumptive face of the person by using Partial Face
Recognition”**

By

Kalpanie Kaushalya Karunarathana

(2013544)

Supervised By

Mr.Chathushka Dilhan

.....
Signature of Supervisor

.....
Signature of Student

Abstract

“The convict”, “The suspect” and the “The victim”. etc. in a crime will never be certain until they are recognized by their face or the appearance. The question is being we equipped with this vital information in criminal investigation? Although it is unpleasant we must admit that we are investigating criminal cases with less info and at times we torture the wrong person due to lack of information regarding the exact suspect.

Below statics chart display the number of criminal cases happened in Sri Lanka in 2016. According to that many criminal cases are pending for decision due to lacking proofing evidence.

In addition, it shows the increasing rate of criminals. Identify the face is a good evidence to proof the correct offenders. Therefore, this solution will be important to the people and the society. According to below information identifying the offenders is very crucial thing for the society.

All the police officials and courts are in need of systematic and well tested procedure to identify the missing threads in criminals. The author what addresses here is to identify and trace down the criminal by his/her authentic face.

This proposed system was introduced a method to identify the offenders whose faces were recorded in partially or fully. It will be having a feature for remake the presumptive face of the person which is recorded in partially. In addition, there is a feature comparison to identify extract person. Partial face recognition techniques, image processing approaches, face detection approaches and neural network approaches were supported to the author for produced a higher accuracy, Flexibility, User friendly system to remake the presumptive face of the person.

The above issue is currently in function approximately a 60% of identification of faces. The author here addresses the issue keeping in mind of developing 90-95% progress in face recognition with regard to 60% on or before VIVA. Significance of this project is not only fulfilling the academic need but it benefits the whole system and its wellbeing.

Subject Descriptors:

Partial Face Recognition, Face detection, Video Processing, Neural Networking.