

CRIMINAL IDENTIFICATION SYSTEM USING FINGERPRINT PLUS SPEAKER RECOGNITION

A dissertation submitted to the
Computer Science and Technology Degree Program,
Uva Wellassa University
in fulfillment of the requirements for the award of the
Degree of Bachelor of Science

by

THISANA SUNDARALINGAM

Registration Number:

UWU/CST/09/0042

Abstract

Generally biometric attributes are used in the criminal identification systems.

Speaker recognition is referred as the identification of a person by the characteristics of the voice. This technique assists to verify the identity of an individual.

Fingerprint authentication means the automated method for verifying matches between two human fingerprints.

This research is based on speaker recognition and fingerprint recognition in criminal identification.

Signal processing front end is the common technique used for speaker recognition and minutia extraction is used for fingerprint recognition.

In this research both of the techniques have used for the speaker and fingerprint recognitions.

The research is coded in MATLAB and SQL server ODBC connection is used for the database connection and the technology is neural network.

Both recognitions contain the training and testing phase separately .Training phase is for recording voices and fingerprints pre stage. And in the testing phase the newly found voice clip or fingerprint is stored and compared with the previous output.

Increased number of voice clips and fingerprints increases the efficiency of the system.