INCIDENT PROFILING WITH FACE RECOGNITION SYSTEM FOR ILOILO CITY PNP

A Thesis Project

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ABSTRACT

During the past few years, the images analysis and understanding has received significant attention and one of the most successful application was face recognition that can identify or verify a person from a digital image or a video frame from a video source. Facial recognition technology has emerged as an attractive solution to address many current needs for identification and the verification of identity claims. It brings together the promise of other biometric systems, which attempt to tie identity to individually distinctive features of the body. Developing this study will help Iloilo City Police Office (ICPO) help identify criminals and will reduce the time in entering data regarding a case.

This stand-alone application Incident Profiling with Face Recognition System for Iloilo City Police Office (ICPO) will be used to easily profile all the incident reported all around the city. Face Recognition System will help identify those criminals if they have a previous criminal offense. The system can generate a summarized report on a week, monthly or annual basis has a crime statistic on dashboard. Summarized reports from other stations will be sent to the main office with the help of the system thus eliminating the manual way to send from other stations using the VPN technology. The stations will be able to communicate with each other securely with the help of VPN. All information entered on the system will be stored on the main database and will be available anytime on every station if they are connected on the VPN server.

V-model was utilized on the development of the system, basing the association of a testing phase for each corresponding development stage. Every testing execution should follow some sequence and this methodology is the perfect way to perform the testing approaches with the goal of creating an accurate and credible system.

The Incident Profiling with Face Recognition System will be an aid in terms of verifying a criminal if they had a previous history of crime based on his image, thus eliminating the manual way of verifying those criminals. The system can determine widespread crimes being committed throughout the city using the systems' crime monitoring feature. It can provide an easy access in information about the offender and have less time and effort acquiring data. The police have more reliable information and authenticity of data about a convinced criminal. The system can to generate summarized reports and statistics on any type of periodicity.