

**CRIME ANALYST: A FINGERPRINT VERIFIER SYSTEM**  
**THROUGH IMAGE PROCESSING USING DEEP NEURAL NETWORK**

A Capstone Project

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by

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## **ABSTRACT**

Beholding the current situation of our community, lack of security and safety is a major issue in the rapid increase of crime where miscreants take advantage of the traditional vulnerable security system. Alarming high increase of crime rates throughout the years is believed to be due to the outdated facilities used by the officials who were servicing our municipality's massive population. Additionally, the evidence for these so called "petty crimes" is circumstantial and law enforcement officials are unable to resolve the matter because they have very limited information at their disposal. As a result, civilians or victims of crimes, that are considered trivial, don't bother to report the crime.

The system study aimed to develop an interface to save person's information, setting up biometric fingerprints and retrieving all the data by fingerprint imaging verification.

The method used by the researchers in developing the system is the waterfall model its step by step proves that flows like water helped the researchers stay on schedule and revise the project real-time.

One way to solve the very poor actions in the field of solving crimes is to create a system that would help the investigative team find out who were the suspects easily. The system was developed that can save person's personal information. It has a biometric feature that save fingerprints imaging. It retrieves the data of the person by verifying its fingerprint through image processing.

The researchers then conducted a testing onsite and the results were great. It is also suggested that the system should be updated from time to time. Lastly, future researchers may improve the system by adding biometric facial recognition feature.