



Informatics Institute of Technology

In Collaboration with

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Crime Buster

An Automated Criminal Profiling System

A dissertation by

Saranga Wijerathna

Supervised by

Mr. Achala Aponso

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ABSTRACT

Information Technology throughout the years since it was introduced, has contributed in many ways to the betterment of the world and has influenced areas like Business, Economics, Education, Communication, Medicine, Engineering, Transportation and many other areas which one might come across in day to day life. It has been proven that time saving is the best outcome of using Information Technology in any area.

Criminal Profiling is an area which comes with forensics where past criminal records are carefully being observed and then come into different crime predictions or try to map the information which is filtered through the profiling with a new incident and try to come into conclusions. This process has been a very complex process for forensic officers as it includes a bit of psychology and other factors which make things very complex to be properly analyzed within a certain period of time and with a considerable accuracy.

The project “Crime Buster” that is addressed in this report discusses on proposing an automated criminal profiling tool in order to overcome the accuracy, complexity and reliability issues that exist in the current manual criminal profiling system. “Crime Buster” tries to eliminate the manual process of observing data by using a well-recognized data mining technique. Also it has a mapping system developed which is capable of comparing a new crime record with past records and give out a result. It has been developed to provide the best user experience by reducing the complexity and it is tested with comprehensive testing criteria that validates system aspects like user friendliness, stability, reliability and accuracy. The project outcome would be highly beneficial to the criminal investigation process in Sri Lanka or in any other country by increasing the efficiency.

Subject Descriptors : Information Systems, Criminal Investigation, Offender Profiling Systems, Data Process Management, Forensics, National Security

Key words : Criminal Profiling, Data Mining, Pattern Recognition