DESIGN AND IMPLEMENTATION OF AN

AUTOMATIC PEOPLE IDENTIFICATION SYSTEM

USING FINGERPRINTS

A PROJECT REPORT PRESENTED BY

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to the Board of Study in Statistics and Computer Science of the
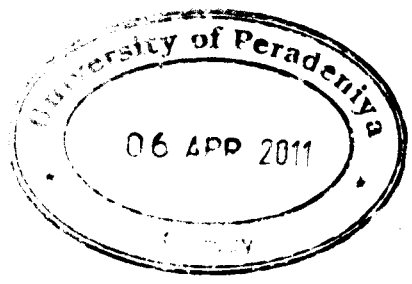
POSTGRADUATE INSTITUTE OF SCIENCE

in partial fulfillment of the requirement

for the award of the degree of

MASTER OF SCIENCE IN COMPUTER SCIENCE

of the

UNIVERSITY OF PERADENIYA

SRI LANKA

2009

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It is needless to reiterate the importance and the use of person identification and authentication systems in today's society. It is an essential facility especially in the aspect of law enforcement, while the systems of varying capability are used in many other day-to-day applications worldwide.

Personnel identification and authentication systems used in Sri Lanka have inherited problems such as; having to depend totally on visual examination and comparison of a printed image with the person, the ease of tampering the present identity card given to people, changes in the picture with time, inability to compare with a library sample remotely or otherwise, and non inclusion of other more reliable identification features like the finger print.

Therefore, it is clear that person identification method mentioned above is too old, and does not perform with the expected accuracy. Since the security features employed in the current NIC are very low it can be easily forged. As an effort to develop a better system which is expected to provide higher levels of identification accuracy, with remote accessibility, this report describes the development of a network based software system that includes the picture and finger prints of a person for identification purposes. The system can be used to include personal data, pictures, and fingerprints with ease, and once entered, it can also verify the identity of a person by using either the identity number with fingerprint or the fingerprint as the search key.

The tests results proved that it works with 100% accuracy for the sample fingerprints used for testing the identification and verification processes. The developed system could be launched as a network based application over a network of computers to make it accessible remotely.