

Department of Electrical & Computer Engineering

North South University



CSE499: Senior Design

Project Title: Fingerprint to Face Reconstruction Using Neural Network

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Declaration

It is hereby acknowledged that:

- No illegitimate procedure has been practiced during the preparation of this document.
- This document does not contain any previously published material without proper citation.
- This document represents our own accomplishment while being Undergraduate Students in the North South University.

Sincerely,

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Approval

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation.

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ABSTRACT

Determining a person's identity is one of the most important challenges to address when constructing multi-accessible structures, such as computer apps, vehicles or actual buildings. A system that protects secret information or valuable objects places high-security expectations on identification. This project provides a novel paradigm for generating one biometric element from another based on neural artificial networks. An intelligent system was devised and created to assess the correlations between fingerprints and faces, as well as to prototype and increase the presence of relationships. It can be used in biometrics, information security, access control, law enforcement, smart cards, and surveillance systems, among other things.