INFORMATICS INSTITUTE OF TECHNOLOGY

in collaboration with

UNIVERSITY OF WESTMINSTER

A Dissertation By

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for

SecureMe

A Software Solution to secure children from various mobile applications.

[with a special focus on children below 10 years of age]

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Abstract

Mobile applications today consist of various features that had transformed mobile phones to one of the basic necessities of human beings. Along with the evaluation of mobile phones, not only adults children are also interacting with these devices on a daily basis. These were provided for children for a valid cause by parents, yet it creates some major concerns in the society today. These concerns consist of negative impact to children such as depression, mental disorders, exposure to cyber-bullying etc. It was identified that these are caused due to children's social media usage.

In order to address the issues and limitations stated above, the project will focus on producing an efficient and effective software solution, which will provide a layer of security for children [using image processing] from mobile applications.

SecureMe application provides face recognition at phone unlock to verify the user and display only the relevant apps configured for the user. This is identified using an image captured at phone unlock with a pre-uploaded image of the user. If the user is available in the system as an authorized personnel, he/she have the ability to view all applications available while other do not. The applications to be hidden will be set by the owner of the mobile or the parent. The application was tested accordingly to verify its clarity and has been proven of its worth by the evaluation of a variety of people. Therefore the produced software solution can be attested as a valuable and helpful application for the problem domain stated above.

Keywords

Mobile Security, Face Recognition, Children and Mobile, Child security with IT