Security Implementation using Biometric

Shrimadhav U K

Guided by: **Dr. Vinod Pathari**

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Abstract—**The project aims to develop a biometric security system, which can protect the users device(s) from unauthorized or unauthenticated access. The idea is inspired from Microsoft Windows Hello and Google Now, which allows us to speak our mind and the machine does it, through the profound advancement in machine learning and artificial intelligence. This project aims to implement an application which can recognize the face and the voice of the user, and accordingly allow or deny access to the system.**

I. INTRODUCTION

Biometric Security is gaining more and more attention recently. This project attempts to implement an application which can take the voice input from a microphone, face input from a camera, and verify the authenticity of the user accessing the system.

II. MOTIVATION

Human beings have reached a stage where

III. RELATED WORKS

1) Google Now https://www.google.com/search/about/learn-more/now/
2) Microsoft Windows Hello https://support.microsoft.com/en-in/help/17215/windows-10-what-is-hello

IV. PROBLEM STATEMENT

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V. HIGH LEVEL DESIGN

1) Design a function which takes the user voice through the microphone, and the name of the user and returns True or False, accordingly.
2) Design a function which takes an image of the user, using the camera, and the name of the user and returns True or False, accordingly.
3) Finally, design a system which unifies the functions designed above. The system should be able:
   - to override the default login screen in a GNU/Linux system.
   - to ensure the integrity of the confidential details created using the above functions.

VI. WORK PLAN

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