## CS4089 Project Report

# Security Implementation using Biometric

Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology in Computer Science and Engineering

Submitted by
B130253CS Shrimadhav U K

Under the guidance of **Dr. Vinod Pathari** 



Department of Computer Science and Engineering NATIONAL INSTITUTE OF TECHNOLOGY CALICUT Calicut, Kerala, India – 673 601

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#### Abstract

The project aims to develop a biometric security system, which can protect the user's 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. I plan to implement an Android application which can recognize the face and the voice of the user, and accordingly allow or deny access to the system.

## Datasets Required: Yes

- 1. http://vision.ucsd.edu/content/yale-face-database
- 2. http://www.speech.cs.cmu.edu/databases/

#### **Related Works:**

- P. Jonathon Phillips, A. Martin, C.l. Wilson, M. Przybocki, An Introduction to Evaluating Biometric Systems http://www.face-rec.org/databases/151436.pdf
- Microsoft Windows Hello https://support.microsoft.com/en-in/ help/17215/windows-10-what-is-hello
- 3. Google Now https://www.google.com/search/about/learn-more/now/

## Tools Needed:

- 1. CMU Sphinx http://cmusphinx.sourceforge.net/
- 2. Open C V http://opencv.org/
- 3. Android SDK and Studio https://developer.android.com/studio/index.html