

A Major Project Report On

# **OFFLINE SIGNATURE VERIFICATION USING FEATURE EXTRACTION METHOD AND EUCLIDEAN DISTANCE**

Submitted in partial fulfilment of the requirements

For the award of the degree of

## **MASTER OF TECHNOLOGY IN SOFTWARE ENGINEERING**

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### **CERTIFICATE**

This is to certify that the project report entitled “**OFFLINE SIGNATURE VERIFICATION USING FEATURE EXTRACTION METHOD AND EUCLIDEAN DISTANCE**” is a bona fide record of work carried out by Ghanshyam Naredi (2K13/SWE/03) under my guidance and supervision, during the academic session 2013-2015 in partial fulfilment of the requirement for the degree of Master of Technology in Software Engineering from Delhi Technological University, Delhi.

To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/Institute for the award of any Degree or Diploma.

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## **ABSTRACT**

Biometrics has provided various techniques to recognize a person based on physical attributes .Biometric technologies are becoming foundation for highly secure identification solutions. The need for biometrics can be found in many local and government departments, military operations etc. Features measured can be any or combination of face, retina, handwriting, iris, signature and tone of voice.

Signatures are extensively used for the purpose of providing authenticity for a person. In various commercial applications like transactions via bank cheques, it is unrealistic to check manually the entire person's signature in limited amount of time .So there is highly need for automated signature verification and identification techniques. Handwritten signature is different from other textual. People used to draw a shape as their signature which is in static form. So we can infer lot of important information from these shapes and can use them for identification and verification purpose.

Signature can be done in two modes when a signature is made on paper with a pen it is called as offline mode. If one does a sign on a tablet in real time it is called as online mode. In online mode of signatures some more information which is dynamic in nature can inferred which is not possible to obtain in offline mode. Such dynamic Information is pressure, time taken to put sign, pen angle etc. The present research work is done in the field of offline signature verification system by extracting some special features that make a signature difficult to forge. In this research work, existing signature verification systems have been thoroughly studied and a model is designed to develop an offline signature verification system.

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