

An executive summary of the final report of work done on the Minor Research Project of Ms Jeshma Nishitha DSouza entitled "AN EFFECTIVE STUDY ON IRIS RECOGNITION SYSTEM USING DIFFERENT IMAGE ANALYSIS ALGORITHM", sanctioned by UGC, vide sanction letter No. 2105-MRP/15-16/KAMA002/UGC-SWRO Dated 31-MAR-2016.

### **EXECUTIVE SUMMARY**

Each individual is different from other because of their unique characteristics. Using these features it is possible to build a system to identify the authorization of an user in any organization. Identifying a person using technology based on physical and physiological behavior is biometric system.

Bio metric system is mainly used for security. Compared to other recognition system iris recognition is one of the best biometric techniques. The iris pattern varies from person to person, so capturing, storing and using these samples for identification of any employee in any organization would give more security. And time and man power will be saved.

The iris image of the individuals will be stored in a database .Whenever the user is capturing his iris image using any device the captured image will be compared with the stored image. If the stored and captured images are same then pattern matching step will be successful.

Here in this research project a detailed study is done based on the available algorithm. And the algorithms are executed in MATLAB.In this research project, study is carried out to check the different types of biometric systems. For example the finger print, voice recognition and iris recognition etc. And the various stages of iris recognition are identified. This includes capturing image, removing noisy data, identifying useful information, segmentation of iris, normalization, feature extraction and matching of the images. Using MATLAB the working of algorithm has been checked. Matching of image was done using hamming distance.

According the review on these algorithms it is observed that many of the researcher uses the Daughman's Integro-differential operator for segmentation, canny detector for edge detection, rubber sheet model for normalization and hamming distance for matching the pattern for the better result. It is also been identified iris recognition is one of the best and secure biometric method.