ABSTRACT

A biometric system provides special and automatic identification of an individual based on characteristics and unique features showed by individuals. With the need for security system going up, Iris recognition is emerging is one of the important methods of biometrics-based identification system. Our system basically explains the Iris verification system that is attempted to implement in Matlab. Firstly, image preprocessing is performed followed by extracting the iris portion of the eye image. The extracted iris part is then normalized.

Our system examines the developing automated iris verification for personal identification in order to verify both uniqueness of the human iris and also its performance as a biometric based on Legendre moment. The iris verification system consists of the iris pre-processing system and iris authentication algorithm. The algorithm of the processing for the iris verification is also able to localize the pupil region and circular iris, occluding eyelashes and eyelids, and reflections. The system performed with a test on UPOL image database resulted on false accepted rates (FAR) and false rejected rates (FRR). The performance measured which was stored in the database scored very small each for FRR and FAR since the Legendre moment invariants had matched perfectly.