ABSTRACT

Periocular biometrics is the characteristic trait of biometrics used for human recognition that involves the region around the eye. Acquisition of the periocular biometric is expected to require less subject cooperation while permitting a larger depth of fields compare to traditional ocular biometric traits (viz., iris, retina, and sclera). In the proposed work, I will study the feasibility of periocular region as a biometric trait for human recognition as compared to other ocular biometrics. Global and local information are extracted from the periocular region using texture and point operators results in a feature set for representing and matching this region.

In this work, we will develop to novel computational intelligence based and technique for periocular biometric based for human recognition. In most of the researcher, it has been found that statistic based applications employed for periocular based human recognition. Therefore, we will design to develop, synergistic, integration of neural fuzzy system for efficient periocular based biometric system. Moreover, we will use different feature extraction techniques such as LBP, PCA, and ICA for pre-processing of periocular biometrics. Comparative Analysis with other competent technologies is also the essential part of this research work.

KEYWORD

Periocular, Biometrics, computational, Intelligence, Feature extraction, face, fusion, local binary patterns, periocular recognition, and scale-invariant feature transform.