Abstract

In this paper a delineate the new human identification method is proposed: sclera recognition technique. Due to the uniqueness of the sclera pattern, it can be used as identification in place of code, fingerprint, face recognition and voice recognition. To distinguish different patterns, some tonal and illumination corrections are performed to get a clear sclera area without disturbing the vessel pattern structure[8]. This paper aims at developing a new method for sclera segmentation which works for both color as well as grayscale images. The blood vessel structure of sclera is different for different people and it lies in the region of the visible wavelengths, therefore it can be used for the human identification method (ID). To obtain shape and structure of a sclera vessel kernel functions are used in order to separate out the magnitude and phase plots. Gabor wavelet filter is a bi-dimensional Gaussian function which separates the R & G plane of the scanned image and due to its 2D nature, the B plane is difficult to plot as well as recognize (mathworks). Also lot of people has blue iris which is difficult to identify, hence plotting the graph of R and G only would be easy.
References

1. A. Suganya (PG scholar) and M. Sivitha (Assistant Professor), "A New Biometric using Sclera Vein Recognition for Human Identification" in IEEE 2014.

Index Terms

Computer Science  Pattern Recognition

Keywords

Sclera Recognition, Gabor-wavelet filter, Kernel Function