Abstract

Iris recognition system is becoming more popular day by day and is being used in many sectors for authentication replacing traditional methods like password, ATM etc. Iris recognition system is more accurate due to unique and stable iris patterns. Here, a feature extraction method based on multi-resolution analysis is proposed. Iris image is represented at multiple resolution levels and feature vector is formed by combining detailed information obtained at different resolution levels. Further, support vector machine classifier is used for recognition purpose to handle nonlinearity of features. Experiment is performed using CASIA 3.0 database with an objective to arrive at optimum number of features with high recognition rate.

References

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Iris Recognition System based on Multi-resolution Analysis and Support Vector Machine


Index Terms

Computer Science

Pattern Recognition

Keywords

Iris recognition, Multi-resolution analysis, wavelet transform, support vector machine, RBF kernel