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Abstract

Face recognition is an interesting issue in pattern recognition. In this paper, we propose a method for face recognition using 3D depth information. The goal is to get minimum features and produce a good recognition rates. We extract 3D clouds points from 3d vrml face Database, then the nose tip for each sample is detected and considered as new origin of the coordinate system, Gaussian Hermite Moments are applied to characterize each individual and Back propagation neural network is applied for the recognition task. Experimental results

shows that Gaussian Hermite moments with global depth information perform significantly better than another method based on local depth information, in this study we consider the case of using ratios of distances and angles between manually selected facial fiducial points.

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Index Terms

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