Abstract

This paper describes a robust and efficient method for rotation and location independent identification and localization of facial images using one modified Radial Basis Function Network (RBFN) which embeds a new Heuristic Based Clustering (HBC) and Back Propagation (BP) learning. HBC in RBFN determines the natural number of clusters or groups on the basis of 'person-view'. BP network learns to identify a 'person' irrespective of his view. The method successfully performs location invariant upright and rotated facial identification in different views and expressions with or without occlusion. The learning as well as identification with standard facial database is fast, efficient,
effective and the accuracy as well as precision of the system with Holdout Method is moderate.

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Index Terms

Computer Science

Keywords

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