Accelerate the Face Detection Optimization with Edge detection and the Discrete Cosine Transform (DCT)

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Abstract

This study presents a new method for accelerating and optimizing face detection, while preserving a high level of accuracy. This method uses local features that are extracted using block-base discrete cosine transform (DCT). This study uses edge detection method for face recognition with ICA algorithms. The technique used for edge detection is Laplacian of Gaussian (LOG). To find objects, face position and local information the discrete cosine transform is used. Here the main idea is edge detection and finding face position in the picture for DCT processing. Edge detection was applied for accelerating image processing. In this paper we use Cohn-Kanade AU-Coded Facial Expression Database.

References

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Computer Vision And Image Understanding, 91:6-21, 2003
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Index Terms

Computer Science

Artificial Intelligence

Keywords

Face Detection  DCT  Edge detection  image processing  LOG.