عنوان مقاله:

Local gradient pattern - A novel feature representation for facial expression recognition

محل انتشار:

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خلاصه مقاله:

Many researchers adopt Local Binary Pattern for pattern analysis. However, the long histogram created by Local Binary Pattern is not suitable for a large-scale facial database. This paper presents a simple facial pattern descriptor for facial expression recognition. Local pattern is computed based on local gradient flow from oneside to another side through the center pixel in a 3x3 pixels region. The center pixel of that region is represented by two separate two-bit binary patterns, named as Local Gradient Pattern (LGP) for the pixel. LGP pattern is extracted from each pixel. Facial image is divided into 81 equal sized blocks and the histograms of local LGP features for all 81 blocks are concatenated to build the feature vector. Experimental results prove that the proposed technique along with Support Vector Machine is effective for facial expression recognition

کلمات کلیدی:

Facial Expression Recognition, Local Feature Descriptor, Pattern Recognition, CK+, LIBSVM

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