ABSTRACT

Facial expression recognition is an interesting subject. Its application open a possibility of a whole new more natural way for human to interact with computer.

In this final task an expression recognition system has been created using Local Binary Pattern (LBP) method as feature extraction method. LBP has faster computation due to its simple algorithm, while still retain feature efficiently. JAFFE dataset used for experiment. k-Nearest Neighbor and Support Vector Machine (SVM) is used for classification. As implementation is done by using Matlab 2015a.

Results of experiments shows that LBP has been able to produce discriminative feature of facial expression. 84.3% of accuracy obtained from experiment with LBP operators (p=8,r=8) in the person-dependent scheme.

Keywords: Facial Expression Recognition, LBP, k-NN, SVM