ABSTRACT

Some traditional fire detection tools have been used to detect fire, but they have a weakness in that they need require human resources to verify whether the alarm they produce is indeed a real fire alarm or simply a result of low accuracy levels. For that reason, this fire classification based on texture and color feature using saliency classification algorithm were built. Writer use a combination of saliency algorithm and YCbCr as a fire segmentation, Local Binary Pattern (LBP) and Gray Level Co-occurrence Matrix (GLCM) as a texture and color feature extractor, and finally writer used Support Vector Machine (SVM) as a classifier and got 76.534% of accuracy.

Keywords: fire classification, saliency classification algorithm, ycbcr segmentation, local binary pattern, gray level co-occurrence matrix, support vector machine