

## Abstract

The accuracy of fire detection has always been the main goal in fire detection research. The selection of the method used in detecting fire is the thing that most affects the accuracy value in detecting fire. The author uses a rule based method to filter the fire pixel values, then uses a spatial analysis method to get the energy value of the fire object and uses a local binary pattern as texture analysis and a support vector machine as a classifier and gets an accuracy of 89.4%.

Keywords: fire detection, rule based, spatial analysis , wavelet transform, local binnary pattern, support vector machine