Abstract

Artificial neural network is used for analyzing and training the sensed data which is gathered by different channels. In this paper, we use different combinations of techniques to detect smoke.
and flame detection algorithms in a video. The past sensed data cannot respond quickly and fire and smoke may not capture quickly. The region partitioning technique is proposed, which will increase the accuracy and also reduce test data so that rather than using a whole frame in a video it uses on part of that frame. The flame characteristics are used for normalization data we are processing. The use of neural network in combination with image processing can improve the accuracy and also help to predict the data. In improvement the wrong alarm problem is decreased. The double band method is use to detect fire. The region which we are analyzing for detecting fire and smoke is calculated directly so that it can reduce computational time.

References

- Forest fire images: http://www. flickr. com

**Index Terms**

Computer Science
Applied Sciences

**Keywords**
Artificial Neural Network  Flame Detection  Imageprocessing.