different image processing algorithms.
2. Since the flame will be active during the burning of the fire, this feature was also used in the detection of the fire.
3. The CNN algorithm is used to find out whether there is a fire in the images used.
4. According to the results obtained from all fire detection methods, the presence of fire was detected with a high success rate.
The rest of the article is organized as follows: In Chapter 2, materials and methods are described. Experimental results are given in Chapter 3 and results in Chapter 4.

2. Material and Methods

Detection of fires at an early or later stage can prevent many material and moral losses [31]. Detection of fire is a challenging problem due to factors such as different lighting conditions, colored objects, moving objects. For this reason, a framework consisting of a set of algorithms has been proposed so that fire detection can be performed with high success considering all

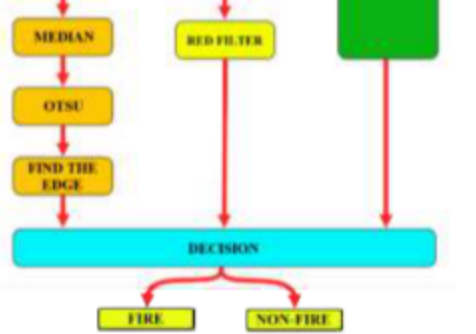

Fig. 1. Suggested framework structure for fire detection on images

2.2. Dataset

The dataset used in the study is an enriched dataset consisting of images obtained from search engines by combining the datasets