

ABSTRACT

Fire is a flame, whether it is small or large, an undesirable place, situation and time. In general, every place has the potential to experience a fire. But at this time, the smoke sensors are the most widely used devices to detect fires. Where the smoke sensor can only detect fires if the fire is large.

So that a system is needed to detect early fires. In this final project, an image-based fire alarm system is designed, using a laptop and webcam as the main equipment. The method for using Convolutional Neural Networks (CNN) to identify fire. The system created has an accuracy rate of 92%.

Keyword : *Fire detection, Webcam, Convolutional Neural Network*