LITERATURE SURVEY

S.NO	TITLE	AUTHORS	ABSTRACT	DRAWBACKS
1.	Using Popular Object Detection Methods for Real Time Forest Fire Detection	Shixiao Wu, Libing Zhang	In this paper, we focus on three problems that surrounded forest fire detection, real-time, early fire detection, and false detection. For the first time, we use classical objective detection methods to detect forest fire: Faster R-CNN, YOLO (tiny-yolo-voc, tiny-yolo-voc 1, yolo-voc.2.0, and YOLOv3), and SSD, among them SSD has better real-time property, higher detection accuracy and early fire detection ability. We make the fire and smoke benchmark, utilize the new added smoke class and fire area changes to minimize the wrong detection. Meanwhile, we adjust YOLO's tiny-yolo-voc structure and propose a new structure tiny-yolo-voc1, the experiments proves that this improves the fire detection accuracy rate. This paper is very practical for forest safety and real time forest monitor.	Sometimes detection may not be accurate in this YOLO - VOC structure.

2.	An energy efficient framework for detection and monitoring of forest fire using mobile agent in wireless sensor networks	Kartik Trivedi, Ashish kumar Srivastava	Forest fire (or wildfire) has been a great threat to the depleting greenery of the earth. If reserved forests of any country catches wildfire, it suffers great damage. So, it is essential to detect the fire early in order to preserve the forest. Wireless Sensor Networks (WSNs) has been a boon in wildfire detection and monitoring. Timely detection of wildfire is possible with the use of WSN. The use of Mobile Agent (MA) in WSN has helped in increasing the lifetime of energy. This paper introduces a framework that incorporates the use of MA in WSN that can help in faster detection of forest fire and monitoring of it with minimum consumption of energy.	Sometimes disfuction of mobile agent leads to problem in the functioning of wireless sensor network. And the detection may not occur.
3.	Convolutional Neural Networks Based Fire Detection in Surveillance Videos	Khan Muhammad	The recent advances in embedded processing have enabled the vision based systems to detect fire during surveillance using convolutional neural networks (CNNs). However, such methods generally need more computational time and memory, restricting its implementation in surveillance networks. In this research paper, we propose a cost-effective fire detection CNN architecture for surveillance videos. The model is inspired from GoogleNet architecture, considering its reasonable computational complexity and suitability for the intended problem compared to other computationally expensive networks such as AlexNet. To balance the efficiency and accuracy, the model is fine-tuned considering the nature of the target problem and fire data. Experimental results on benchmark fire datasets reveal the effectiveness of the proposed framework and validate its suitability for fire detection in CCTV surveillance systems compared to state-of-the-art methods.	Sometimes the cctv surveillance may not work properly due to loss of connnection.