S.No.	Journal Paper Name	Authors	Source	Findings
1.	Early Fire Detection System using wireless sensor networks.	Shen, D.; Chen, X.; Nguyen, M.; Yan, W.Q.	IEEE	From this journal, we use cluster heads as landmarks for the rest of the sensor for localization in order to define their GPS coordinates according to the cluster head's coordinate. The hierarchical architecture of Wireless Sensor Networks is most efficient and extensible for dense networks which simplifies the management of the forest as well as the communication and the localization of fire and sensors.
2.	Automatic Early Forest fire Detection based Gaussian Mixture Model.	Wickramasinghe, C.; Wallace, L.; Reinke, K.; Jones, S.	IEEE	In this paper, we use a Gaussian mixture model. Because it can reconstruct the background with the advantages of small storage space, adaptive learning and good noise toleration. Based on the slow spread of smoke, firstly a time delay parameter improves Gaussian mixture model for extracting candidate smoke regions. Then, two motion features of smoke, the rate of area change and motion style are used to select smoke regions from the candidate regions.
3.	A review on early forest fire detection system using optical remote sensing	Bu, F.; Gharajeh, M.S.	IEEE	In this journal, we use modern optical sensor networks which are known for their long range communication capabilities and extremely suitable for sensor and

				telemetry applications. Detection methods that use optical sensors or RGB cameras combine features that are related to the physical properties of flame and smoke, such as color, motion, spectral, spatial, temporal, and texture characteristics.
4.	Early Forest Fire Detection using Drones and Artificial Intelligence.	Tanase, M.A.; Aponte, C.; Mermoz, S.; Bouvet, A.; Le Toan, T.; Heurich, M.	IEEE	From this journal, we use drone cameras and UAVs, because they always patrol the forest. The fire detection is based on a platform that uses Unmanned Aerial Vehicles (UAVs) which constantly patrol over potentially threatened by fire areas. The UAVs utilize the benefits from Artificial Intelligence (AI). This allows the use of computer vision methods for recognition and detection of smoke or fire, based on images or video input from the drone cameras.
5.	Developing a real-time and automatic early warning system for forest fire	Muhammad, K.; Ahmad, J.; Mehmood, I.; Rho, S.; Baik, S.W.	IEEE	In this paper, we use Software solutions which are used for implementing microcontroller kits and to simulate and design circuit boards. The method used here is making use of stand-alone boxes which are deployed throughout the forest. Those boxes contain different sensors and a radio module to transmit data received from these sensors. Each sensor will be tested individually and

				XBee modules are configured and paired using XCTU Software.