

## Simulation of Forest Fire Using Wireless Sensor Network

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**Abstract :** In this paper, we proposed a simulation system using Wireless Sensor Network (WSN) that will be distributed around the forest for early forest fire detection and to locate the areas affected. In Brunei Darussalam, approximately 78% of the nation is covered by forest. Since the forest is Brunei's most precious natural assets, it is very important to protect and conserve our forest. The hot climate in Brunei Darussalam can lead to forest fires which can be a fatal threat to the preservation of our forest. The process consists of getting data from the sensors, analyzing the data and producing an alert. The key factors that we are going to analyze are the surrounding temperature, wind speed and wind direction, humidity of the air and soil.

**Keywords :** forest fire monitor, humidity, wind direction, wireless sensor network

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