**Abstract**

Wireless sensor network (WSN) technologies have been employed in recent years for monitoring purposes in various domains from the engineering industry to our home environment due to their ability to intelligently monitor remote locations. The weather forecasting and weather monitoring applications are in high demand.

In this project, I have developed a cost-effective solution to address a purely deterministic weather forecasting model that utilizes Wi-Fi nodes fixed at different points and commonly form one cluster to monitor the weather conditions in a place. The model also provides the decision-making choice from the cluster. The proposed model is highly dynamic and adaptive which uses a deterministic energy-efficient clustering protocol.

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