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University of Babylon
College of Information Technology
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Abnormal Event Detection in Weather Based on Wireless Sensor Network

A Graduate Project
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Abstract

Recently, The importance of weather forecasts lies in their ability to provide crucial information for various sectors and individuals, impacting safety, disaster preparedness, agriculture, transportation, energy management, construction, infrastructure, and outdoor activities. By anticipating and preparing for weather-related events, such as storms, hurricanes, heatwaves, and extreme temperatures, individuals and organizations can take proactive measures to mitigate risks, protect lives and property, optimize resource allocation, and enhance overall resilience. Accurate weather forecasts not only improve safety and efficiency but also contribute to economic development, environmental sustainability, and quality of life.This project focuses on the detection of abnormal weather events utilizing wireless sensor networks (WSNs). which enable real-time data collection across large geographical areas, this research aims to develop efficient algorithms for identifying abnormal weather patterns.