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Sustainable IoT-Based Environmental and Industrial Monitoring System

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Abstract:
This research studies the development of a comprehensive system that is represented as a sustainable IoT-based environment and industrial monitoring system based on applications of the wireless network. Environment pollution can cause damage to human health and causes global warming. Most pollutants are invisible to the human eye. The system created can detect pollution on early stages and as a precaution step. This system can detect the following quantities via some sensors: temperature, humidity, light of intensity, and gas. The main sensor that is attached to this product is to detect the air quality in the surrounding by giving reading values. This system is using internet of things (IoT) and the result is transferred to a phone by using the Blynk apps. After download the Blynk Apps, the position, functions, and connections must be set. The first steps are collecting data and to keep them save in the memory card. The next step is to transfer the data to a laptop by using internet of things (IoT). From the data shown at the laptop, the user identifies the status of the environment condition. This system is able to detect any pollution that occurred and can take action on early stages. In addition, the system is able to monitor the data statistically for further analysis and predict what is going to happen.