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Plant Disease Detection using IOT

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Abstract: *Plant diseases significantly impact crop productivity, making early detection crucial. This project, plant disease detection using IoT, integrates ESP32, temperature, humidity, and soil moisture sensors to monitor plant conditions in real time. Sensor data is transmitted to the Blynk IoT platform, enabling automation by activating a roof, water pump, or fan based on environmental conditions. A machine learning model classifies plant health using images from a webcam or user uploads via a Flask-based web interface. This system enhances precision agriculture by combining IoT automation and AI-driven disease detection.*

Keywords: plant disease detection, IoT automation, machine learning, precision agriculture, smart farming

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