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IoT-Based Smart Farming

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Abstract: This paper mainly describes the IoT's scope in the smart farming field and its applications. The main aspiration of the proposed system is to develop a robot that gives a helping hand to farmers by reducing the labor work by implementing the multi-doing tasks like plowing, seed sowing, rolling, cutting, and harvesting, which require a massive amount of human resources. The robot is also developed to check for the soil moisture and water level using their respective sensors for better crop yield. The ESP8266 nodeMCU is used along with a variety of sensors to monitor the actions on the field and the factors influencing it. A Blynk app which is a mobile application is used to remotely control and monitor the field and help in the management and control of the robot in the farm field.

Keywords: Smart Farming, ESP8266 nodeMCU, 1 channel Relay module, DC driver circuit, Blynk, Sensors, Arduino

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