PAPER TITLE: Application of IoT in Plant Watering System

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JOURNAL/CONFERENCE: Journal of Emerging Technologies and Innovative Research (JETIR) AUTHOR: Punitharaja, Department Of Computer Science and Engineering, Galgotias University, Yamuna Expressway, Greater Noida, Uttar Pradesh PROBLEM

MENTIONED/SOLUTION OBTAINED: The paper addresses the challenge of providing timely and accurate watering information to farmers in agricultural operations. It proposes the implementation of an automated plant watering system utilizing IoT technology. The solution involves integrating a microcontroller, soil moisture sensor, Ethernet shield, and water pump to deliver real-time irrigation details over the internet.

ALGORITHM USED: The paper does not explicitly mention a specific algorithm, but it does describe the development of an algorithm for calculating the threshold value of the soil moisture sensor.

TOOLS USED/IMPLEMENTED:
Microcontroller
Arduino Uno Senso
Soil moisture sensor Networking
Ethernet Shield Actuator
Water pump Communication
GSM Module

RESULTS AND DISCUSSION: The system was successfully implemented and tested. It demonstrated the capability to provide real-time moisture information and automate the watering process. The prototype of the components used for the plant watering system was illustrated.

KNOWLEDGE ACQUIRED: The paper provides insights into the application of IoT technology in agricultural operations, specifically in the domain of plant watering. It highlights the importance of accurate soil moisture measurement for efficient irrigation.

IMPORTANT REFERENCE: S. V Devika, S. Khamuruddeen, S. Khamurunnisa, J. Thota, and K. Shaik, “Arduino Based Automatic Plant Watering System,” Int. J. Adv. Res. Comput. Sci. Softw. Eng., 2014.