Intelligent Mobile Energy Storage Container for Agricultural Irrigation

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Can intelligent irrigation systems improve irrigation efficiency and agricultural productivity?
These systems utilize real-time sensor data to improve irrigation efficiency and agricultural productivity. This paper presents an automatic, low-cost intelligent irrigation system based on a fuzzy rule-based inference approach and an energy-aware routing algorithm.

What is intelligent irrigation system?
The proposed intelligent irrigation system introduces a novel integration of fuzzy logic-based irrigation control,deep neural networks (DNNs) for decision-making,and an energy-efficient Open Shortest Path First (OSPF)-based routing mechanism to optimize water usage and enhance network lifetime.

What is a solar-powered smart irrigation system?
These sensors act as the sensory organs of the farm,continuously monitoring the dynamic ecosystem and relaying valuable information to centralized control systems. The foundation of a solar-powered smart irrigation system is its ability to harness renewable energy sources to power IoT devices and agricultural machinery.

What is smart irrigation system?
The smart irrigation system came with key aims such as maintaining the optimal moisture levels of soil while at the same time minimizing the usage of water and preserving the state of the crop. The above objectives were all achieved by the system due to the real time monitoring and controlling of the system.

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