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(57) Abstract :
IOT-ENABLED SMART IRRIGATION SYSTEM FOR USE IN AGRICULTURE AND LANDSCAPING APPLICATIONS
Accordingly, embodiments herein disclose an internet of things (IoT)-enabled smart irrigation system for optimizes energy usage and reducing carbon footprint in agriculture and landscaping applications. The smart system comprises a frame, a plurality of water valves attached to the frame to dispense water to crops in the field, and a plurality of cameras and position sensors which are configured to capture field data to form a model of the field. Further, the smart system may include a processor configured to control movement of the frame to move around a field for irrigation. The processor analyzes water spray pattern, wind speed and weather parameters, and edges of one or more spray patterns for a predetermined area and determines irrigation system control options based on the model, a current state of the irrigation system and environmental factors from the data of cameras and position sensor.

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