

Design and development of a smart farm simulation and visualization system in a 3D environment

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Abstract: This topic focuses on designing and developing a simulation and visualization system for a smart farm in a 3D environment. In the current context, with the rapid development of IoT, AI, and 3D modeling technologies, creating this system has become necessary to enhance farm management performance. The main objective is to build a system that allows farmers and farm managers to monitor and control operational processes effectively through real-time data visualization from sensors in the farm. The research method involves integrating IoT, AI, and 3D modeling technologies to build an interactive 3D model of the farm. The expected result is a system that can support improving the monitoring, control, and management capabilities of a smart farm.

Keywords: IoT, 3D Modeling, Smart Farm, Agricultural Management, AI