

Smart Poultry Farm Automation

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Abstract: *Our case-study paper entitled "Smart Poultry Farm Automation" aims to enhance the efficiency and productivity of poultry farming through the application of advanced automation technologies. Poultry farming plays a crucial role in meeting the growing global demand for poultry products. However, traditional farming methods often face challenges related to labor intensity, resource management, and monitoring. This project proposes the design and implementation of a comprehensive automation system for poultry farms. The system will integrate sensors, actuators, and IoT (Internet of Things) technologies to automate various tasks such as environmental control, feeding, watering, and health monitoring of poultry. Real-time data collection and analysis will enable farmers to optimize farm conditions, improve bird health, and minimize resource wastage. Key components of the proposed system include environmental sensors for monitoring temperature, humidity, and ventilation; automated feeders and waterers controlled by IoT devices; and health monitoring systems utilizing image processing or sensor data for early disease detection. The system will be designed to provide farmers with remote access and control through a user-friendly interface, allowing them to monitor farm operations and receive alerts or notifications. The expected outcomes of this project include increased productivity, reduced operational costs, improved animal welfare, and better decision-making for farmers. By leveraging automation and IoT technologies, the proposed system will contribute to the modernization and sustainability of poultry farming practices*

Keywords: Poultry, Internet of things, Humidity, Temperature, Ventilation

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