Patent Search

Invention Title	AI AND IOT BASED POST-HARVEST DISEASE CONTROL IN MAJOR CROPS IN AGRICULTURE
Publication Number	33/2023
Publication Date	18/08/2023
Publication Type	INA
Application Number	202341033464
Application Filing Date	12/05/2023
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	G06N0003080000, G06K0009620000, G06Q0050020000, G06T0007000000, G06Q0040080000

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Abstract:

This invention proposes an AI and IoT-based system for post-harvest disease control in major crops, providing accurate and timely disease detection, monitoring, anc management. The system utilizes computer vision techniques and deep learning algorithms to analyze images of harvested crops for disease identification, while an infrastructure of smart sensors continuously captures environmental data for disease prediction and proactive management. The system also includes a data analyti that generates insights and recommendations for data-driven decision making. The proposed invention aims to enhance crop yield and quality while reducing crop lc use of harmful pesticides, contributing to sustainable agriculture practices. Accompanied Drawing [FIGS. 1-2]

Complete Specification

Description:[001] The proposed invention focuses on the field of agriculture and addresses the critical issue of post-harvest disease control in major crops. Post-har diseases, caused by pathogens and environmental factors, lead to significant economic losses and food waste in agricultural supply chains. Traditional disease cont methods often involve manual inspection, which is time-consuming, labor-intensive, and prone to human error.

[002] The invention seeks to leverage the power of artificial intelligence (AI) and the Internet of Things (IoT) to develop an innovative solution for effective post-harve disease control in major crops. By combining AI algorithms, advanced sensing technologies, and IoT connectivity, the invention aims to revolutionize disease detecti monitoring, and management in the agricultural sector.

BACKGROUND OF THE INVENTION

[003] The proposed invention aims to revolutionize the field of agriculture by addressing the critical issue of post-harvest disease control in major crops. Post-harve diseases pose a significant challenge to the agricultural industry, leading to substantial economic losses and food waste. Conventional methods of disease control a labor-intensive, time-consuming, and prone to human error. Therefore, the proposed invention seeks to develop an innovative solution that leverages the power of intelligence (AI) and the Internet of Things (IoT) to enhance disease detection, monitoring, and management in the agricultural sector.

[004] The invention recognizes that the accurate and timely identification of post-harvest diseases is crucial for effective disease control and mitigation. To achieve t invention harnesses the capabilities of AI algorithms, advanced sensing technologies, and IoT connectivity. By integrating these technologies, the invention aims to c comprehensive and intelligent system that can detect and manage post-harvest diseases in major crops efficiently

View Application Status