

(54) Title of the invention : SYSTEM AND METHOD TO DETECT DISEASE IDENTIFICATION IN AGRICULTURAL FIELD USING WAGON

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(57) Abstract :
 A system (100) for disease identification and yield estimation in agricultural fields using a wagon (102) is disclosed. The wagon (102) is equipped with LIDAR sensors (104) and advanced data processing capabilities. By capturing detailed images of crops and analyzing key features such as plant height, leaf color, and texture, the system (100) utilizes convolutional neural network (CNN) algorithms to detect disease patterns and assess disease severity. Additionally, the system (100) evaluates crop yield estimation by considering the extracted features and disease information. Real-time feedback on disease severity and yield estimation is provided to farmers through a display device (106) attached to the wagon (102), while data transmission to a computing device (110) enables further analysis and decision-making. Through iterative training and optimization, the system continuously enhances its accuracy and effectiveness in disease identification and yield estimation tasks, empowering farmers with actionable insights for optimized crop management and improved productivity.

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