

Home (<http://ipindia.nic.in/index.htm>) About Us (<http://ipindia.nic.in/about-us.htm>) Who's Who (<http://ipindia.nic.in/whos-who-page.htm>)

Policy & Programs (<http://ipindia.nic.in/policy-pages.htm>) Achievements (<http://ipindia.nic.in/achievements-page.htm>)

RTI (<http://ipindia.nic.in/right-to-information.htm>) Feedback (<https://ipindiaonline.gov.in/feedback>) Sitemap (<http://ipindia.nic.in/itemap.htm>)

Contact Us (<http://ipindia.nic.in/contact-us.htm>) Help Line (<http://ipindia.nic.in/helpline-page.htm>)

[Skip to Main Content](#)



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in>)

Patent Search

Invention Title	MONITORING AGRICULTURE WASTE BY IMAGE PROCESSING SYSTEM BASED ON IOT
Publication Number	33/2023
Publication Date	18/08/2023
Publication Type	INA
Application Number	202341035348
Application Filing Date	21/05/2023
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	A01C 071000, G06Q 500200, G06T 050000, H04L 430000, H04N 010000

Inventor

Name	Address	Country
Ms.Neema George	Research Scholar, Department of Computers Science & Engineering, Srinivas Institute of Technology, Valachil, Mangalore, Karnataka, India. Pin Code:574143	India
Dr.Anoop B K	Professor, Department of Artificial Intelligence and Machine Learning, Srinivas Institute of Technology, Valachil, Mangalore, Karnataka, India. Pin Code:574143	India
Dr.N.Susitha	Associate Professor, Department of Computer Science, School of Arts and Science, Vinayaka Mission's Research Foundation (DU), AV Campus, Paiyanoor, OMR, Chennai, Chengalpattu District, Tamil Nadu, India. Pin Code:603104	India
Dr.M.Ramesh	Professor, Department of Computer Science and Engineering, Hindu College of Engineering and Technology, Guntur, Andhra Pradesh, India. Pin Code:522002	India
Mr.Anandbabu Gopatoti	Department of ECE, Hindusthan College of Engineering & Technology (Autonomous), Coimbatore, Tamil Nadu, India. Pin Code: 641032	India
Mr.M.Purnachandra Rao	Associate Professor, Department of Information Technology, KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Guntur, Andhra Pradesh, India. Pin Code:522017	India
Ms.S.Jayachitra	Assistant Professor, Department of ECE, PSNA College of Engineering and Technology, Dindigul District, Tamil Nadu, India. Pin Code:624622	India
Dr.Duraimurugan S	Associate Professor, Department of Information Technology, St.Joseph's College of Engineering, OMR, Chennai, Tamil Nadu, India. Pin Code:600 119	India
Mr.Addagatla Prashanth	Assistant Professor, Department of Electronics and Communication Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India. Pin Code:500043	India
Dr.K.Abhimanyu Kumar Patro	Assistant Professor, Department of Mechatronics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Udipi District, Karnataka, India. Pin Code:576104	India

Applicant

Name	Address	Country
Ms.Neema George	Research Scholar, Department of Computers Science & Engineering, Srinivas Institute of Technology, Valachil, Mangalore, Karnataka, India. Pin Code:574143	India
Dr.Anoop B K	Professor, Department of Artificial Intelligence and Machine Learning, Srinivas Institute of Technology, Valachil, Mangalore, Karnataka, India. Pin Code:574143	India
Dr.N.Susitha	Associate Professor, Department of Computer Science, School of Arts and Science, Vinayaka Mission's Research Foundation (DU), AV Campus, Paiyanoor, OMR, Chennai, Chengalpattu District. Tamil Nadu, India. Pin Code:603104	India
Dr.M.Ramesh	Professor, Department of Computer Science and Engineering, Hindu College of Engineering and Technology, Guntur, Andhra Pradesh, India. Pin Code:522002	India
Mr.Anandbabu Gopatoti	Department of ECE, Hindusthan College of Engineering & Technology (Autonomous), Coimbatore, Tamil Nadu, India. Pin Code: 641032	India
Mr.M.Purnachandra Rao	Associate Professor, Department of Information Technology, KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Guntur, Andhra Pradesh, India. Pin Code:522017	India
Ms.S.Jayachitra	Assistant Professor, Department of ECE, PSNA College of Engineering and Technology, Dindigul District, Tamil Nadu, India. Pin Code:624622	India
Dr.Duraimurugan S	Associate Professor, Department of Information Technology, St.Joseph's College of Engineering, OMR, Chennai, Tamil Nadu, India. Pin Code:600 119	India
Mr.Addagatla Prashanth	Assistant Professor, Department of Electronics and Communication Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India. Pin Code:500043	India
Dr.K.Abhimanyu Kumar Patro	Assistant Professor, Department of Mechatronics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Udipi District, Karnataka, India. Pin Code:576104	India

Abstract:

The proposed invention introduces a system for monitoring agricultural waste using image processing techniques based on the Internet of Things (IoT). By deploying with image processing capabilities in strategic locations across agricultural fields, the system captures high-resolution images to analyze and quantify different types of agricultural waste, including crop residues, excess fertilizers, and pesticide containers. Leveraging IoT connectivity, real-time data from the cameras is transmitted to a centralized monitoring and control platform, accessible remotely by farmers, agricultural experts, and waste management authorities. The system eliminates the need for manual inspections, enabling timely waste detection and proactive decision-making. The accurate identification and quantification of agricultural waste provide valuable insights into targeted waste reduction strategies and sustainable practices. Additionally, the system has the potential to optimize agricultural practices by analyzing historical waste alongside crop yields, weather conditions, and farming techniques, leading to improved resource management, increased productivity, and reduced environmental impact. The proposed invention revolutionizes agricultural waste management by combining image processing, IoT connectivity, and real-time data analysis, contributing to sustainable agriculture and environmental protection. Accompanied Drawing [FIGS. 1-2]

Complete Specification

Description:[001] The proposed invention is a novel system that combines image processing techniques with the Internet of Things (IoT) technology to monitor and manage agricultural waste. This innovative solution aims to address the growing concern of agricultural waste management, which has significant environmental and economic implications.

BACKGROUND OF THE INVENTION

[002] Agriculture plays a crucial role in feeding the world's growing population. However, it is also responsible for generating substantial amounts of waste, including crop residues, unused fertilizers, and pesticide containers. Improper management of agricultural waste can lead to soil and water pollution, greenhouse gas emissions, and overall environmental degradation.

[003] Traditionally, monitoring and managing agricultural waste have been labor-intensive and time-consuming processes. Farmers often rely on manual inspection and periodic visits by agricultural experts to assess waste levels and take necessary actions. This approach is not only inefficient but also prone to errors and delays in identifying and addressing waste-related issues.

[004] With the rapid advancements in technology, there is a need for innovative solutions that leverage automation and data-driven approaches to tackle agricultural waste management effectively. The proposed invention aims to address this need by combining image processing techniques with IoT connectivity.

[005] By deploying cameras equipped with image processing capabilities in strategic locations across agricultural fields, the system captures high-resolution images of the farm environment. These images are then analyzed using sophisticated algorithms to identify and quantify different types of agricultural waste.

[View Application Status](#)



Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>)

Copyright (<http://ipindia.gov.in/copyright.htm>) Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>)

Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>) Contact Us (<http://ipindia.gov.in/contact-us.htm>)

Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019