Title:- CROP MONITORING

Synopsys

by

NAME OF THE CANDIDATE(s)

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Submitted to – Manu Bali Mam

Subject - Artificial Intelligence

(INT404)

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Team:

Mo. Atif – He has done the Planning and step by step process of project also help to write content.

Atul Shukla -he has done the logical part of project to make good as possible, He helps in coding part and also made Synopsis.

Salman Baig- He help for selecting the project and divide works of team, He also doing coding part.

Prahlad Prajapati- he is doing the Major coding portion of project.

Objective/ Aim

Artificial intelligence technology is supporting different sectors to boost productivity and efficiency. AI solutions are assisting to overcome the traditional challenges in every field. AI is shifting the way our food is produced where the agricultural sector's emissions have decreased by 20%. Adapting AI technology is helping to control and manage any uninvited natural condition.

Innovativeness & Usefulness

Today, the majority of startups in agriculture are adapting AI-enabled approach to increase the efficiency of agricultural production. The Market study report stated that the global Artificial Intelligence (AI) in Agriculture market size is expected to reach 1550 million US$ by the end of 2025.

Advantage of implementing AI in Agriculture

The use of Artificial intelligence in agriculture helps the farmers to understand the data insights such as temperature, precipitation, wind speed, and solar radiation.

- AI provides more efficient ways to produce, harvest and sell essential crops.
- AI implementation emphasis on checking defective crops and improving the potential for healthy crop production.
- The growth in Artificial Intelligence technology has strengthened agro-based businesses to run more efficiently.
- AI is being used in applications such as automated machine adjustments for weather forecasting and disease or pest identification.

Artificial intelligence can improve crop management practices thus, helping many tech businesses invest in algorithms that are becoming useful in agriculture.

Forecasted Weather data

AI in an advanced way is helping the farmer to remain updated with the data related to weather forecasting. The forecasted/ predicted data help farmers increase yields and profits without risking the crop.

Monitoring Crop and Soil Health

Utilizing AI is an efficient way to conduct or monitor identifies possible defects and nutrient deficiencies in the soil. With the image recognition approach, AI identifies possible defects through images captured by the camera.

Decrease pesticide usage

Farmers can use AI to manage weeds by implementing computer vision, robotics, and machine learning. With the help of the AI, data are gathered to keep a check on the weed which helps the farmers to spray chemicals only

where the weeds are. This directly reduced the usage of the chemical spraying an entire field.

AI Agriculture Bots

AI-enabled agriculture bots help farmers to find more efficient ways to protect their crops from weeds. This is also helping to overcome the labor challenge. AI bots in the agriculture field can harvest crops at a higher volume and faster pace than human laborers.