
SMART FARM
RXO Co., Ltd.

목차

Company Introduction

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-Vision : A huge multi-national corporation deploying global strategies RXOWORLD $2,941, 334,427,450

RXO, a multinational corporation leading a global strategy.

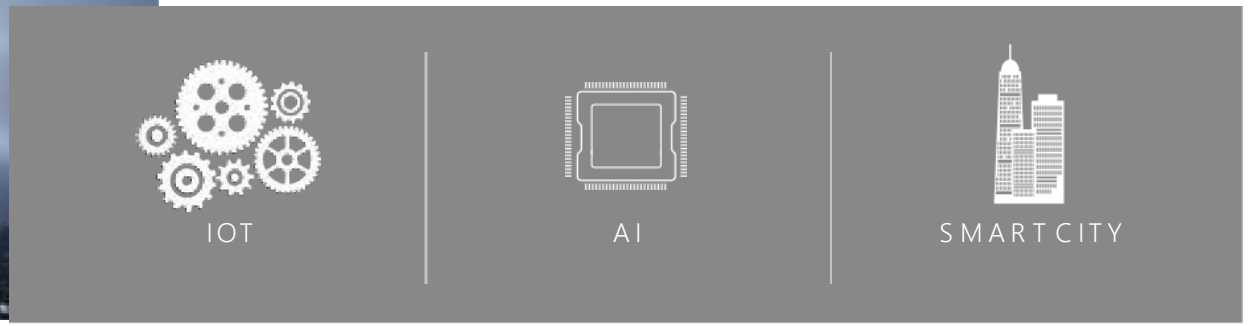
About RXO

Development of a next-generation artificial intelligence system applicable to all electronic products, machines, and equipment.

RXO Co., Ltd. is an AI-based software company specializing in AI-based software and integrated technology solutions. The company develops AI solutions in various fields such as smart cities, healthcare, retail security, and smart agriculture. Its main products include the AI store management robot **WatchBot**, the medical data optimization solution **HealthSync**, the smart farming platform **RXOSF**, and the AI-based recycling classification system **ReDam**.

RXO participated in CES 2025, where it began collaboration discussions with Pfizer and held investment negotiations with Dubai's ADQ. The company is also rapidly growing in the global market by advancing AI smart city projects in several countries, including Mexico, Vietnam, and the Philippines.

Through continuous technological innovation and the expansion of its global network, RXO is emerging as a leading company in the field of AI convergence products.



RXO, a multinational corporation leading a global strategy.

Sales

RXO, a multinational corporation leading a global strategy.

Credit

RXO SmartFarm introduction

This is a smart farm solution that provides integrated control and real-time monitoring of Bluetooth-based IoT devices. It is a comprehensive agricultural management platform based on AIoT technology, featuring environmental data colle ction, cultivation management, crop protection, and safety management functions.

Introduction to key features

Cultivation management function

Prediction of sowing and transplanting times Sowing and transplanting automation system Nutrient and moisture management Temperature, humidity, and light control Growth status monitoring Prediction of fruit harvest time

Crop protection function

Abnormal climate detection

Wildlife detection

Fire detection

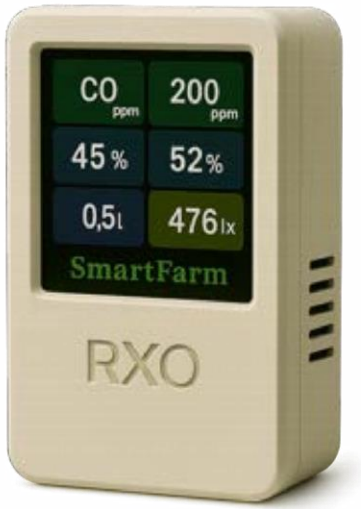
Crop disease detection

Safety management functio n

Farmer safety management

Automatic emergency signal function Transmission to emergency center

Main products introduction



RXO AirSense

RXO AirSense is a smart environmental monitoring device that collects air quality information from farmlands and outdoor environments in real-time and provides integrated feedback through AI-based analysis.
It is equipped with sensors for carbon dioxide (CO_2), carbon monoxide (CO), ultrafine dust (PM1.0), temperature, humidity, and illuminance. It can remotely transmit data to a central processing system via a built-in battery and a LoRa board. The collected data is automatically organized and analyzed by an AI analysis system, providing useful insights for improving the farm environment and enhancing crop health.

RXO SoilProbe

The RXO SoilProbe is a dedicated sensor device for soil environment detection that accurately measures soil temperature, humidity, and pH levels, and remotely transmits data via LoRa communication.
It is designed with a compact, adult-fist-sized form factor. With its mushroom-like design and a 2-pin structure, it can be easily inserted into the soil to collect real-time environmental data.
The built-in battery and LoRa board allow for long-term use without an external power source, and through integration with a central server, it is perfectly compatible with smart farm systems.

Web Platform

RXO SmartFarm operates its own web platform service, utilizing domestic NPU-based servers.

In a high-performance computing environment that integrates eight A100 GPUs, various AI models were trained, including a dedicated SmartFarm chatbot, as well as models for crop analysis, data analysis, motion analysis, wildlife analysis, and crop disease analysis.

These models operate in real-time on the NPU servers, allowing users to visually check the results and receive feedback through the website.

The system supports users in easily monitoring crop growth and carrying out farm management in an automated way.

Mobile Platform

This is a portable farm management device that can be installed throughout a large farm, supporting farm management in various agricultural environments such as greenhouses or open fields. Furthermore, you can check its status and operate it easily in real-time via a web or mobile app.

It includes a computerized system for efficient farm management, allowing for the use of farm information integration and an AI-based farm management system in agricultural environments.

RXO SmartFarm

Cultivation environment information collection device

RXO AirSense

IoT Sensor-Based Environmental Data Collection Device

Air quality detection sensor

AirSense detects the surrounding air quality and measures data such as illuminance, CO, CO_2, fine dust, temperature, and humidity, visualizing this information through a display.

Display

Through the built-in digital display, it intuitively shows the detected air quality information to the user.

Long-range remote connection using LoRaWAN

Equipped with a LoRa board, it enables remote communication with a central processing unit from a distance of up to 15km. By linking with the company's product, the RXO SoilProbe, it allows for integrated operation with the central system over a wider range (up to 30km).

RXO AirSense

Item	Details
Dimensions	80mm(W) x 140mm(H) x 50mm(D)
Weight	Approx. 250g (including battery)
Material	ABS flame-retardant plastic (transparent)
Display	7-inch Nextion LCD touch display (color)
Color	Ivory white + black logo
Installation	Fixed/Stand type (for indoor installation)

Sensor Type	Target	Measurement Range	Accuracy
CO Sensor	Carbon Monoxide (CO)	0 ~ 1000 ppm	±3% FS
CO_2 Sensor	Carbon Dioxide (CO_2)	400 ~ 5000 ppm	±50 ppm or ±3%
Fine Dust Sensor	PM1.0 / PM2.5 / PM10	0 ~ 1000 μg/m³	±10 μg/m³
Illuminance Sensor	Illuminance	0 ~ 100,000 lux	±10%
Temperature Sensor	Temperature	-20°C ~ 80°C	±0.5°C
Humidity Sensor	Relative Humidity	0% ~ 100% RH	±3% RH

Item	Details
Communication Method	LoRaWAN (supports Class A/B)
Frequency	868MHz (EU), 915MHz (US)
Transmission Distance	Up to 15 km (line of sight)
Power Supply	Built-in rechargeable battery (3.7V / 3000mAh)
Charging Method	USB Type-C port (5V, 1A)
Operating Time	Approx. 5–7 days (based on 1-hour intervals)
Operating Temp/Humidity	-20°C to 60°C / 5% ~ 95% RH (no condensation)

RXO SoilProbe

Soil data collection device utilizing IoT sensors

Soil detection sensor

The SoilProbe is equipped with sensors that can measure soil temperature, humidity, and pH levels, serving to collect various types of soil information.

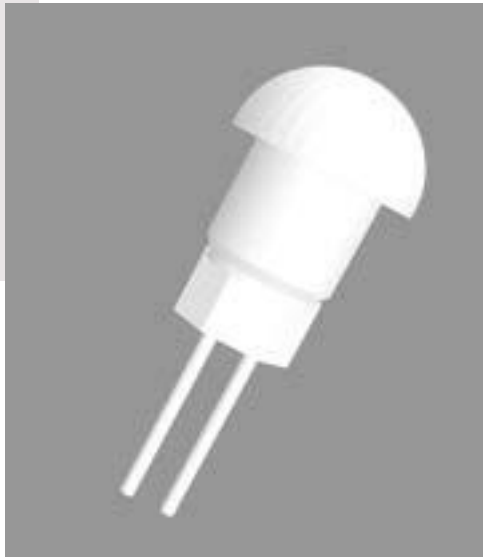
Lithium-ion battery

Using a built-in 2500mAh lithium-ion battery, it can be used continuously for a long time and operates for up to several weeks without a charge. It can be charged via a USB-C cable, and the battery status is sent to the user remotely.

Long-range remote connection using LoRaWAN

Equipped with a LoRa board, it enables remote communication with a central processing unit from a distance of up to 15km. By linking with our company's product, the RXO AirSense, it allows for integrated operation with the central system over a wider range (up to 30km).

RXO SoilProbe



Item	Description
Dimensions	Approx. 75mm(W) × 90mm(H) × 60mm(D)
Weight	Approx. 180g (including battery)
Form Factor	Palm-sized, mushroom-shaped head · Insertion-type dual-pin structure
Material	ABS waterproof plastic (weather-resistant material)
Mounting Method	Soil insertion type (2-pin sensor structure)

Sensor Type	Target	Measurement Range	Accuracy
Temperature Sensor	Soil Temperature	-20℃ ~ 85℃	±0.5℃
Humidity Sensor	Soil Humidity	0% ~ 100%	±3%
pH Sensor	Soil Acidity	pH 3.0 ~ 9.0	±0.3pH

Item	Description
Communication Method	LoRaWAN (Class A supported)
Frequency	868MHz / 915MHz
Transmission Range	Up to 10–15km (in unobstructed environments)
Power Supply	Built-in lithium-ion battery (3.7V, 2500mAh)
Charging Method	Micro USB / USB Type-C selectable
Battery Life	Approx. 1 week per charge
Operating Temp/Humidity	-20℃ ~ 60℃ / 5% ~ 95% RH

01

Cultivation management function

Prediction of sowing and transplanting times

Accuracy 85%

By analyzing real-time sensor data, such as soil moisture, temperature, and light, along with historical input data, the system determines the optimal sowing and transplanting times.

By comprehensively considering climate change and soil environmental variables, it automatically adjusts the appropriate sowing schedule for each crop and creates an optimal environment from the early stages of growth.

Sowing and transplanting automation system

In accordance with the predicted optimal sowing time, an automatic sowing device is used to place seeds at uniform intervals. Soil moisture and nutrient levels are adjusted in real-time to increase the initial germination rate. During the transplanting process, the system analyzes the growth status and uses an automatic transplanter to move crops at the appropriate time. It also creates an environment to help with root establishment, promoting healthy growth.

Nutrient and Moisture Management

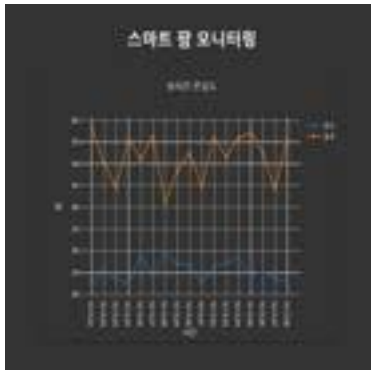
Through an automatic irrigation system and soil analysis, the system precisely controls the crops' moisture requirements and optimizes nutrient supply to support healthy growth.

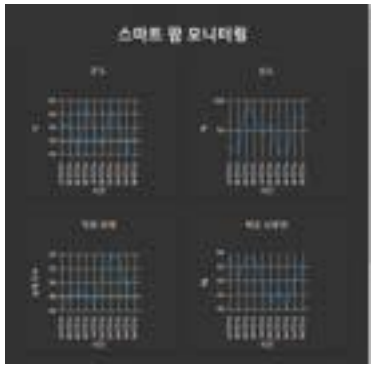
It automatically supplies customized fertilizer by analyzing the necessary nutrient components.

Temperature, humidity, and light control

Utilizing a smart greenhouse and shading system, it controls temperature and humidity in real-time and provides the optimal amount of light according to the season and weather to maintain the necessary environment for crop growth.

Real-time monitoring





Temperature and humidity monitoring

Crop Growth Optimization: Maintaining optimal te mperature and humidity is crucial for maximizing cr op health and yield. By maintaining appropriate te mperature and humidity, you can optimize crop hea lth and maximize yield.

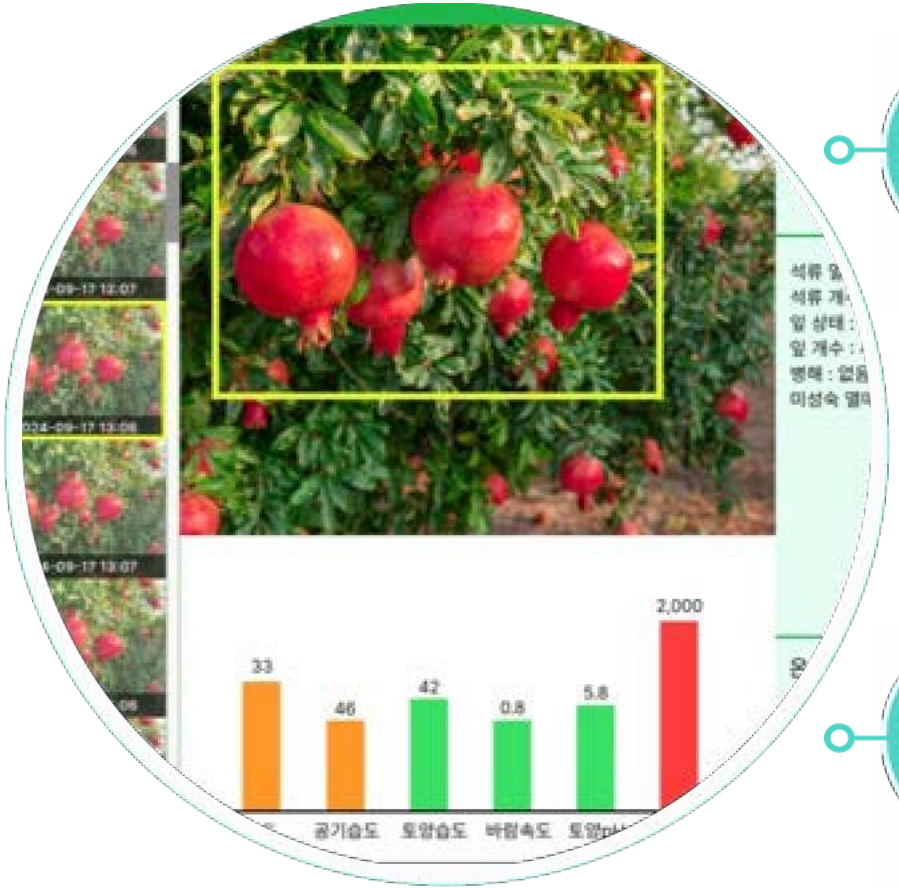
Resource Savings: By adjusting heating, cooling, an d irrigation systems according to environmental con ditions, energy and water usage can be optimized. This contributes to cost reduction and resource con servation.

Plant growth and pest analysis

Utilizing plant image and video data, the system disp lays the ratio according to the plant's growth stage, i nforms about the estimated harvest time, and in cas e of a pest or disease outbreak, it provides information on the identified pest or disease throug h data learned from AI analysis.

SMART FARM

This is a device that trains a Transformer-based model on an A100 to diagnose the quality of pomegranates and manage their on-site environmental conditions.



Diagnosis program

It supports farm managers through a pomegranate disease diagnosis program that utilizes PyTorch and a CLIP model.

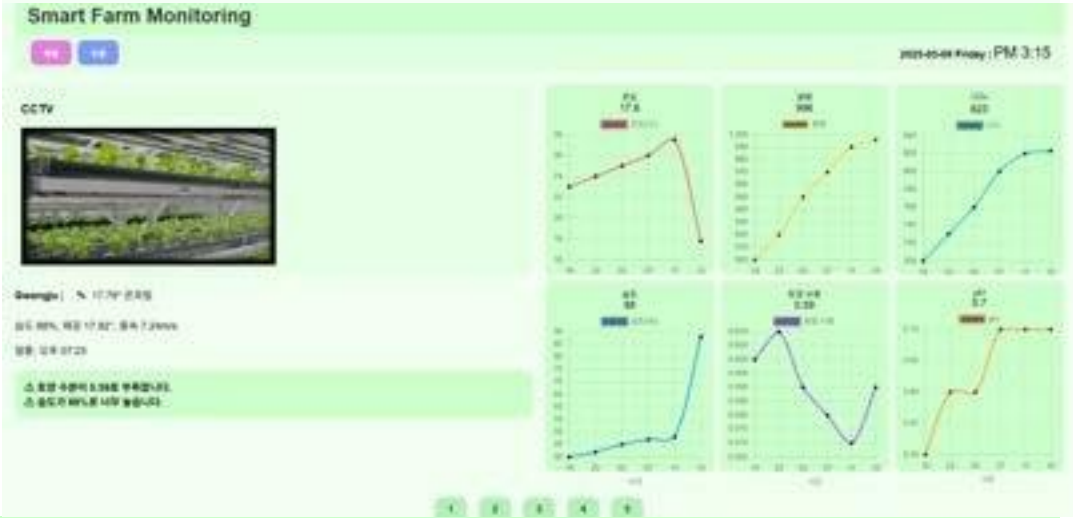
Smart farm environment management

A function that displays values obtained from sensor and AI model analysis results.

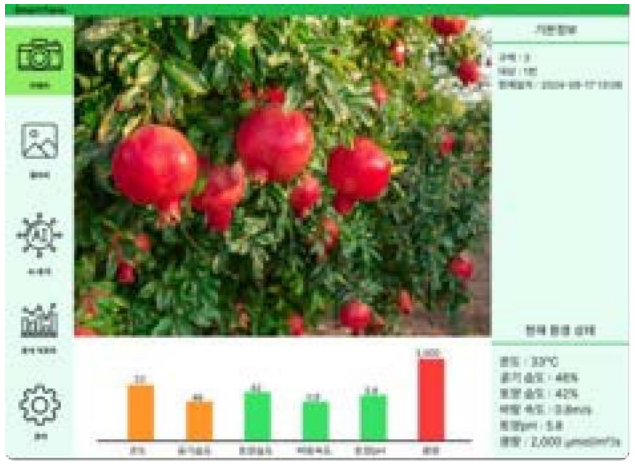
Smart farm environment management

Based on AI analysis reports, we help you maintain a well-managed farm environment.

Web Platform



Mobile PlatForm



Smart farm management

Farm environment management based on analysis reports

Environment management

Based on analysis reports, various environmental factor values are managed.

Smart farm cultivation management

We supply water and nutrients and plant seedlings to create an optimal environment.

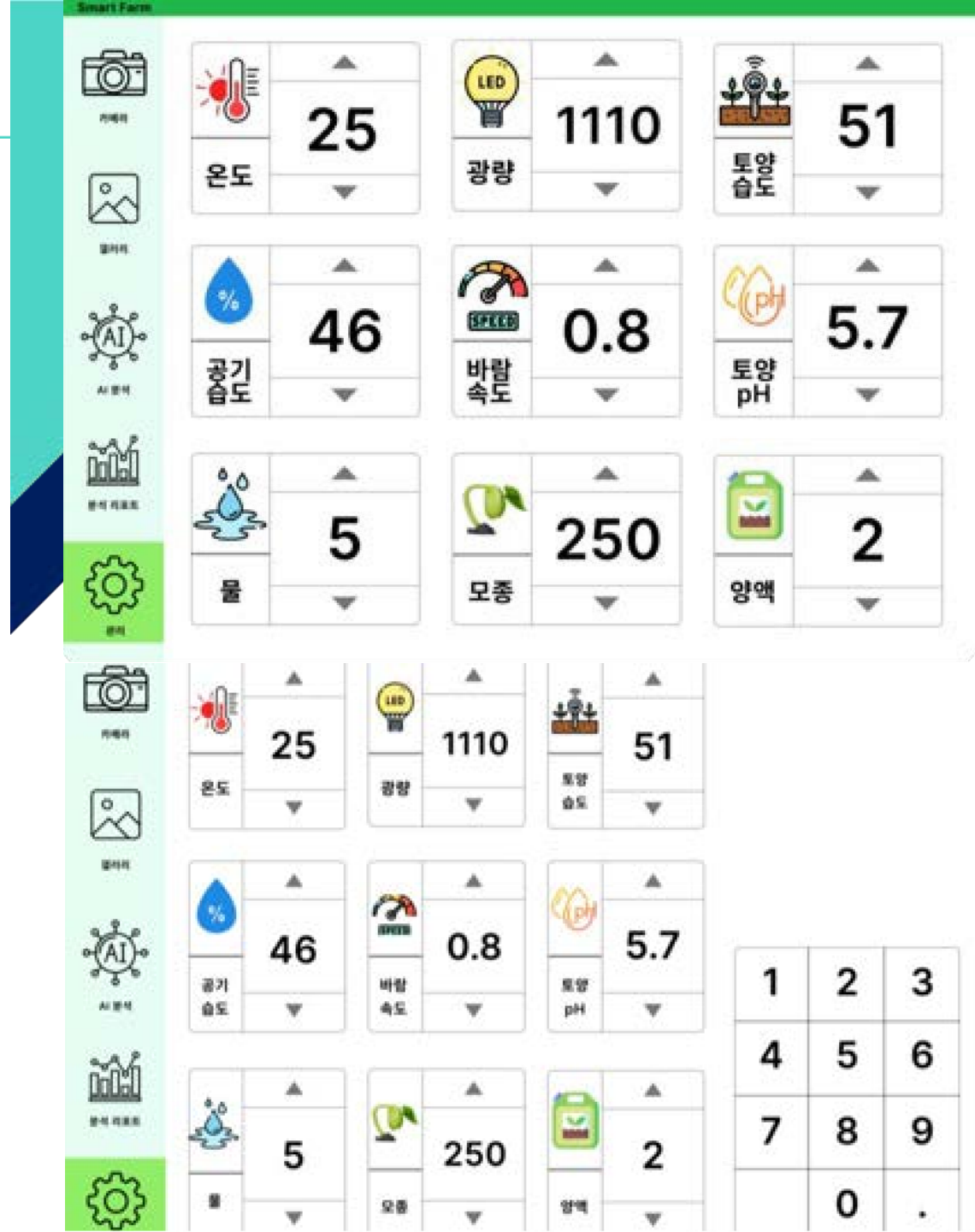
Product

"Smart farm management"

Smart farm environment and cultivation management system

Smart Farm Management Integrated System This system manages environmental factors such as the farm's humidity, temperature, illuminance, and soil pH, automatically supplies water and nutrients according to set values, and plants a predetermined number of seedlings.

The system supports a separate display on a monitor and a laptop, and on the laptop, a number input function can be used.

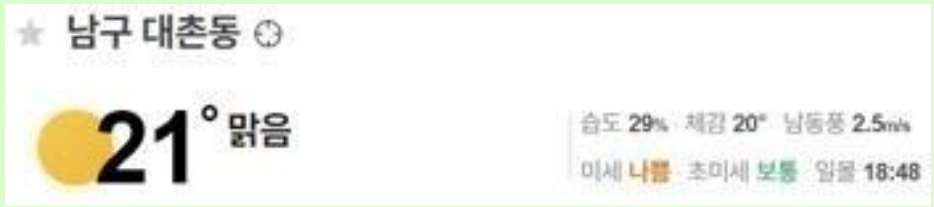


Smart Farm Monitoring

AUTO | Manual

2025-03-27 Thursday Am 09:50

CCTV



Warning Messages

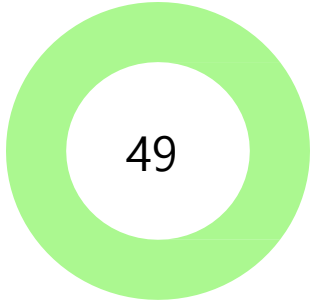
The temperature is high. Please maintain an appr opriate temperature. Soil moisture is low. Please supply moisture.

Temperature

Light intensity

Air concentration (CO_2)

Humidity



Soil moisture

Soil pH

Smart Farm Management

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2025-03-27
Thursday

Am 09:50

Safety management function

Farm 1

Farmer detection

Crop disease detection

Farm 4

Disease detection

Fire Detection

Emergency situation

Farm 5

Fire detection

Wildlife Detection

Farm 7

Wild boar detected

Environmental Data Control

Target	Current
Temperature : 22	Temperature : 27
Light Intensity : 1350	Light Intensity : 1700
CO_2 : 560	CO_2 : 950
Humidity : 64	Humidity : 25
Soil Moisture : 0.59	Soil Moisture : 0.12
Soil pH : 6.2	Soil pH : 5.8

Heater	Humidifier
LED Light	Water Supply
CO_2 Generator	pH Regulator

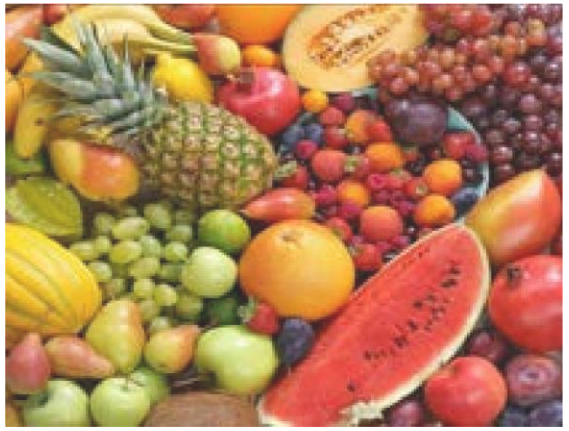
Growth Status Monitoring

Through real-time sensors, data such as temperature, humidity, soil moisture, and light intensity are collected, and the crop's growth status is precisely monitored utilizing AI-based image analysis and time-series models.

Accuracy 85%

Prediction of fruit harvest time

By utilizing image analysis, the growth status is precisely evaluated. By comparing and analyzing data collected from sensors in real-time and various environmental data measured in the past, the harvest time of the crops is predicted.



Smart Farm Management

AUTO | Manual

2025-03-27
Thursday

Am 09:50

Cucumber


SOW April 5 (D-10)

HARV July 13 (D-109)

- The farmer is located.
- Temperature is too low.

Potato


SOW April 12 (D–17)

HARV June 28 (D-94)

- Wild animal detected.
- Soil moisture is low

Tomato


SOW April 24 (D–29)

HARV Sep 21 (D-179)

- Disease detected.
- Temperature is too high.

Eggplant


TRANS April 16 (D–21)

HARV Oct 11 (D-199)

- Disease detected.
- High humidity detected.

Chili Pepper


TRANS April 16 (D–21)

HARV Nov 6 (D-225)

- Fire detected.

02

Crop Protection Function

Climate Anomaly Detection

Real-time sensor data is collected and analyzed to detect climate anomalies, and warning messages are provided to protect crops from sudden temperature changes or extreme weather conditions.

Accuracy 95%

Fire and Wildlife Detection

Using real-time captured images, fires on the farm are detected in advance for quick response, while preventing crop damage caused by wild animals such as wild boars or moles.

Crop Protection Function

Crop Disease Detection

Fire Detection

Wildlife Detection


Immediate fire detection upon occurrence


Predict hazardous situations in advance


Automatic emergency reporting system in critical situations


Automatic fire sprinkler system

Transformer derivative model

accuracy: 90%

예측 결과: Wild Boar

이 이미지는 'Wild Boar'입니다.

Identification of animals
intruding into the farm

Supports farmers in taking swift
and appropriate action

Smart Farm Management

AUTO | Manual

2025-03-27
Thursday

Am 09:50

Safety management function

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Soil pH : 6.2	Soil pH : 5.8

Heater	Humidifier
LED Light	Water Supply
CO_2 Generator	pH Regulator

Crop Disease Detection

Real-time data captured by cameras is analyzed to detect signs of crop diseases, and warning messages are provided at the early stages of disease occurrence to support quick response.

AI POMEGRANATE DISEASE DIAGNOSIS

Pomegranate Disease Diagnosis Platform Using PyTorch and CLIP Model

POMEGRANATE DISEASE IMAGE ANALYSIS | KEY POINT

BY ANALYZING PHOTOS OF THE POMEGRANATE'S APPEARANCE, THE TYPE OF DISEASE IS DIAGNOSED.

AI-Based Quantitative Diagnosis Report | KEY POINT

BASED ON AI ANALYSIS RESULTS, THE CONDITION OF THE POMEGRANATE TREE AND POMEGRANATES IS DISPLAYED IN TEXT FORMAT.

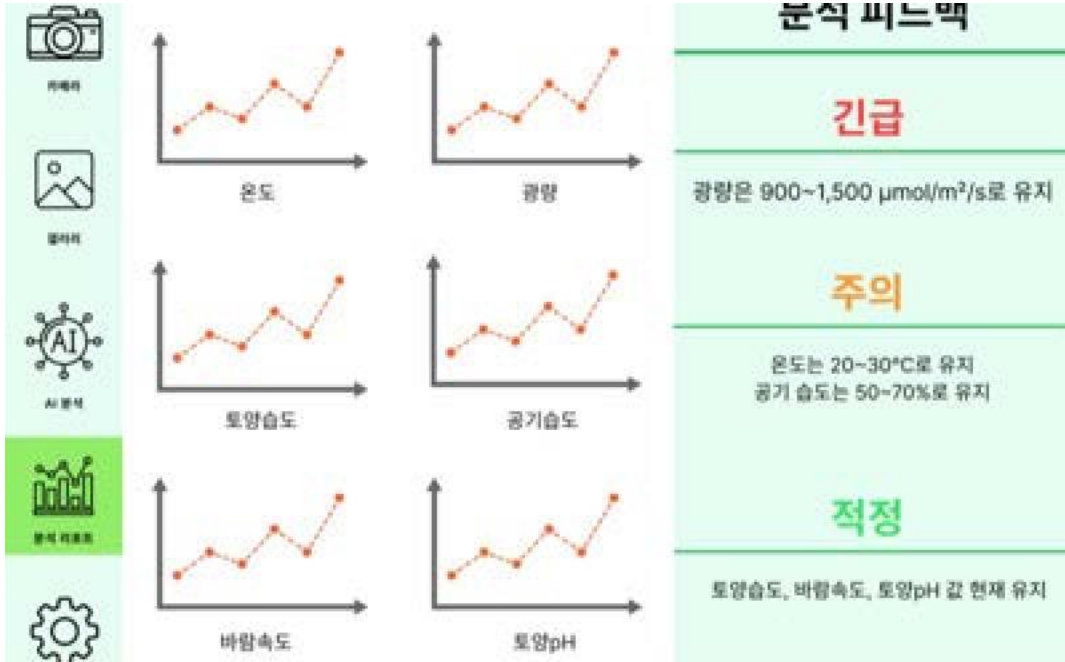
"AI Pomegranate Disease Diagnosis"

Pomegranate Disease Classification Service

Symptoms of diseases are similar, which can lead to the possibility of an incorrect diagnosis.

This AI software analyzes captured images and provides a function to save the results as a report.

This helps farm managers quickly resolve issues based on accurate diagnosis results.



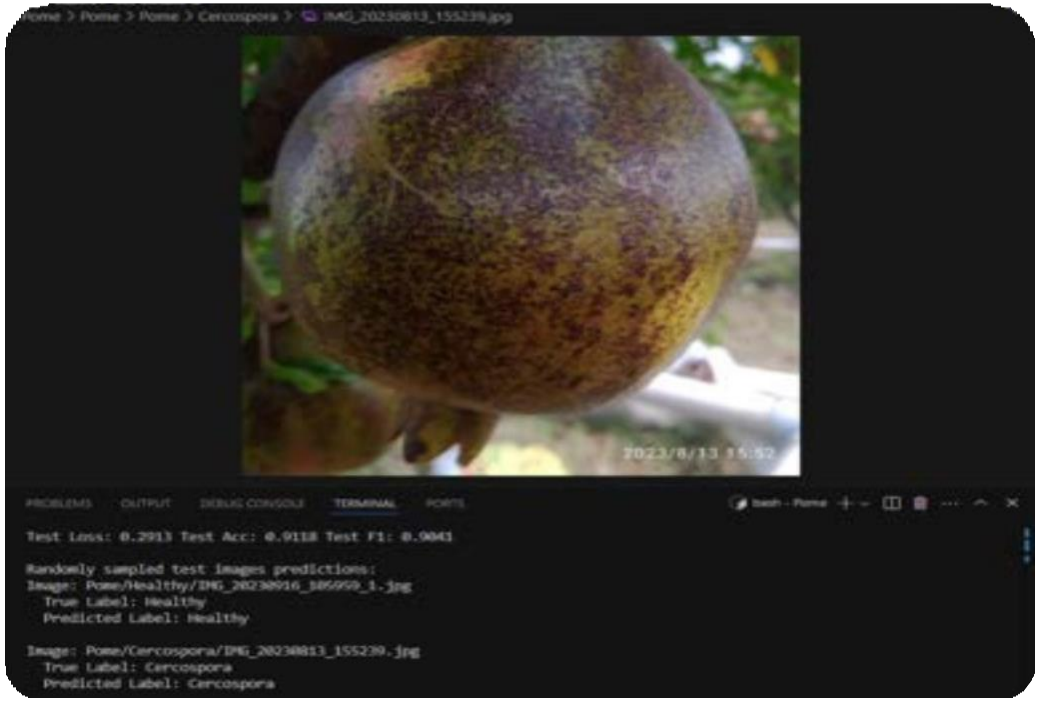
Clip Model

정확도: 90%

Crop Disease Detection

Farm 4

Disease detection



Helps enable a rapid response before the disease spreads

03

Safety Management Function

Safety Management Function Accuracy 90%

By analyzing video data of abnormal behaviors, the system detects risk situations for farmers in real time and predicts the possibility of accidents based on learned data, helping to prevent them in advance.

Safety Management

Farm 1

Farmer detection

Real-time Location Tracking of Farmers + Abnormal Behavior Detection

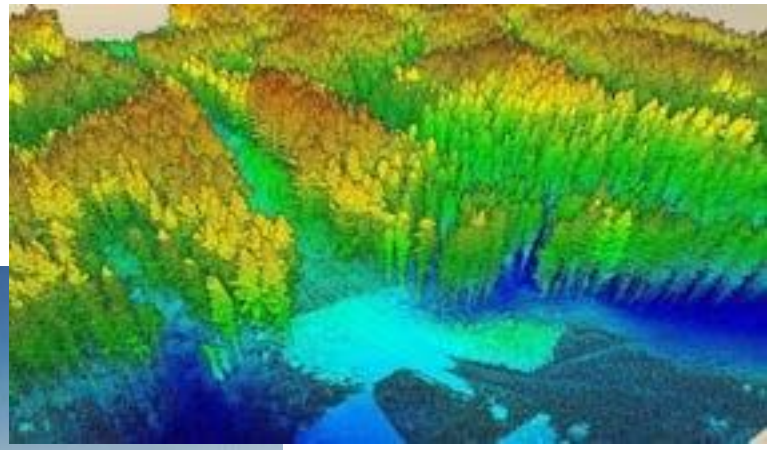
= Early Detection and Response to Emergency Situations

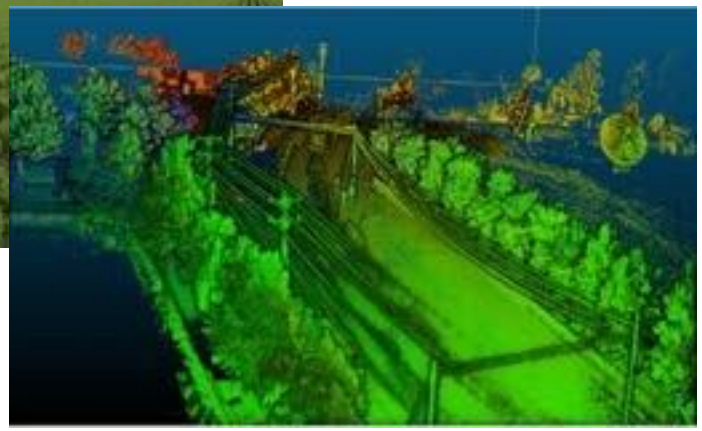
04

Drone utilization Function

02

RXO Smart Farm's Dron e-based 3D Scanning a nd Fertilizer Optimizati on System





Drone-Based 3D Scanning and Fertilizer Optimization System for RXO Smart Farm

The smart farm system developed by **RXO** includes preci sion agriculture management using drones as one of its c ore technologies.
In particular, the **3D scanning program** combines **LiDAR sensors** with AI-based precision models to analyze terrain and soil conditions, providing a solution for optimizing f ertilizer distribution paths.

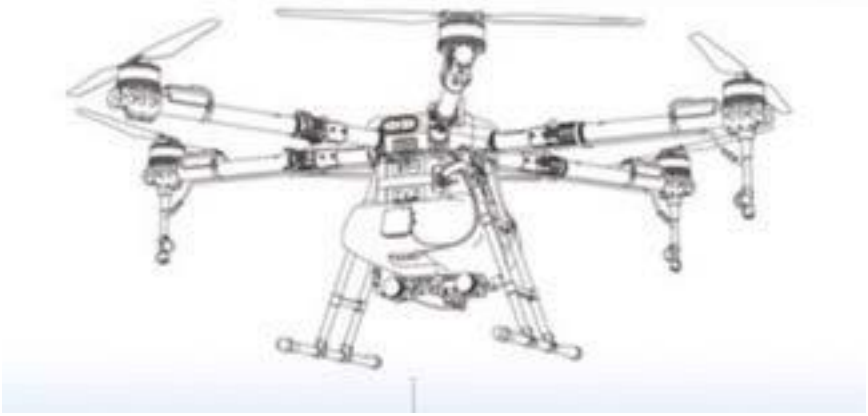
Key Features

1.3D Scanning of Farmland Using LiDAR and AI Utili zes drone-mounted LiDAR sensors to create 3D models of farmland, capturing elevation differences, terrain stru ctures, and soil conditions.

2.Calculation of Optimal Fertilizer Distribution Paths and Automatic Spraying
AI algorithms analyze nutrient distribution imbalances in the soil to identify areas requiring concentrated fertiliza tion and guide automated spraying.

3.Real-Time Feedback and Data Updates
The AI model continuously improves fertilization strategies by comparing historical data with new inputs.
Users can monitor real-time fertilizer usage and soil condition changes through the smart farm dashboard.

02
Providing solutions using self-made AI drones



RXO's In-House Agricultural Drone

RXO is enhancing its smart farm solutions by utilizing its self-developed agricultural drone.

This drone performs multiple functions such as **fertilizer spraying**, **3D terrain scanning**, **crop condition analysis**, and **pest detection**. Compared to commercial drones, it offers **higher performance and efficiency** at a **lower cost**, thanks to integrated AI-based optimization technologies.

Key Features of RXO's Custom Agricultural Drone

1. Cost-Effective In-House Production

•RXO manages everything from design to production, enabling s upply at a lower price point than commercial agricultural drones
•Offers up to **30% cost savings** compared to typical market drones
•Fast and efficient maintenance and after-sales service supported in-house

2. AI-Based Precision Crop and Environmental Analysis

•Equipped with RXO's proprietary AI software
•Integrates **LiDAR sensors** and **multispectral cameras** for 3D analysis of farmland conditions

3. Smart Fertilizer Spraying and Automated Route Optimization

•AI analyzes the crop's nutritional status and executes **customized fertilizer spraying**
•Integrates real-time **weather and wind data** to optimize fertilizer application
•Uses **route optimization algorithms** to ensure even distribution without waste
•Supports **autonomous flight and self-navigation**

05

RXO AI Software Model

AI POMEGRANATE DIAGNOSIS

Pomegranate Disease Diagnosis Platform Using PyTorch and CLIP Model

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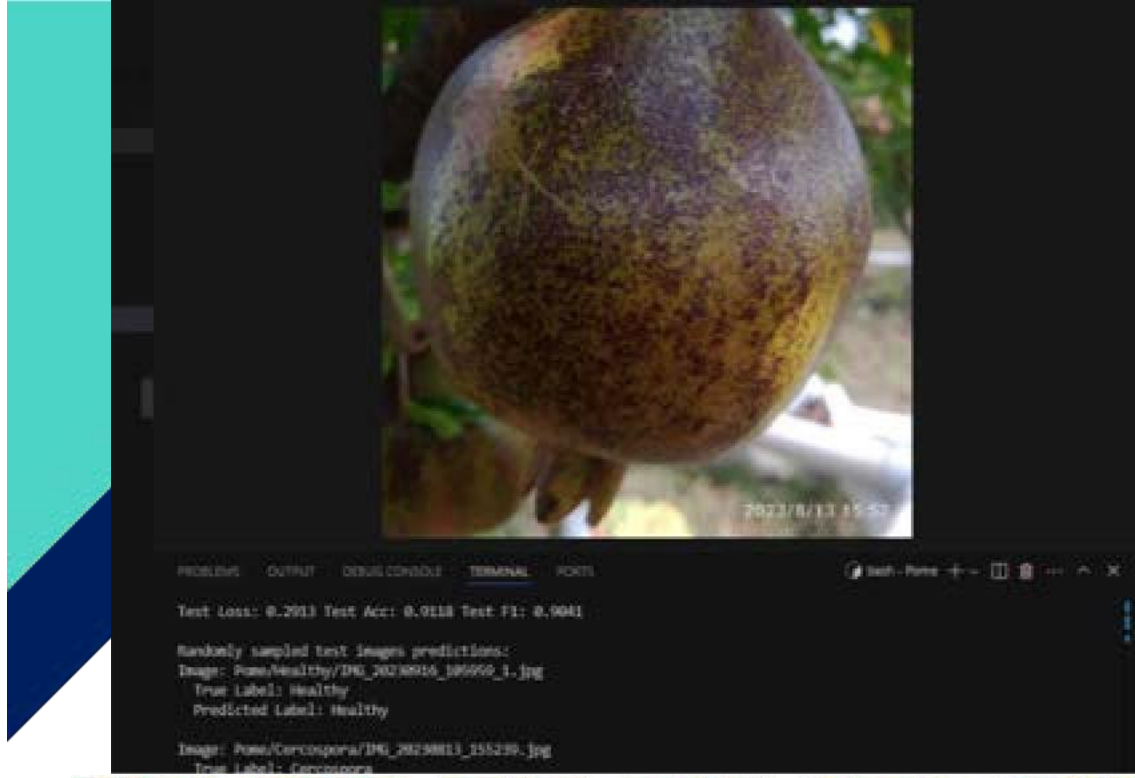
BrainHealthProX RXO

Pomegranate Disease Classification Solution

We've developed a web-based AI-powered pomegranat e disease diagnosis service called 'AI Pomegranate Diagn osis.' This project utilizes PyTorch and a CLIP model to cla ssify and detect types of pomegranate diseases. Specific ally, the AI precisely analyzes the appearance of pomegr anates to identify their quality status with a high accurac y of 90%.



Detecting pomegranate conditions with high accuracy

The developed system can detect the following conditions

Alternaria

Anthracnose

Bacterial_Blight

Cercospora

Healthy

SMART FARM MANAGEMENT

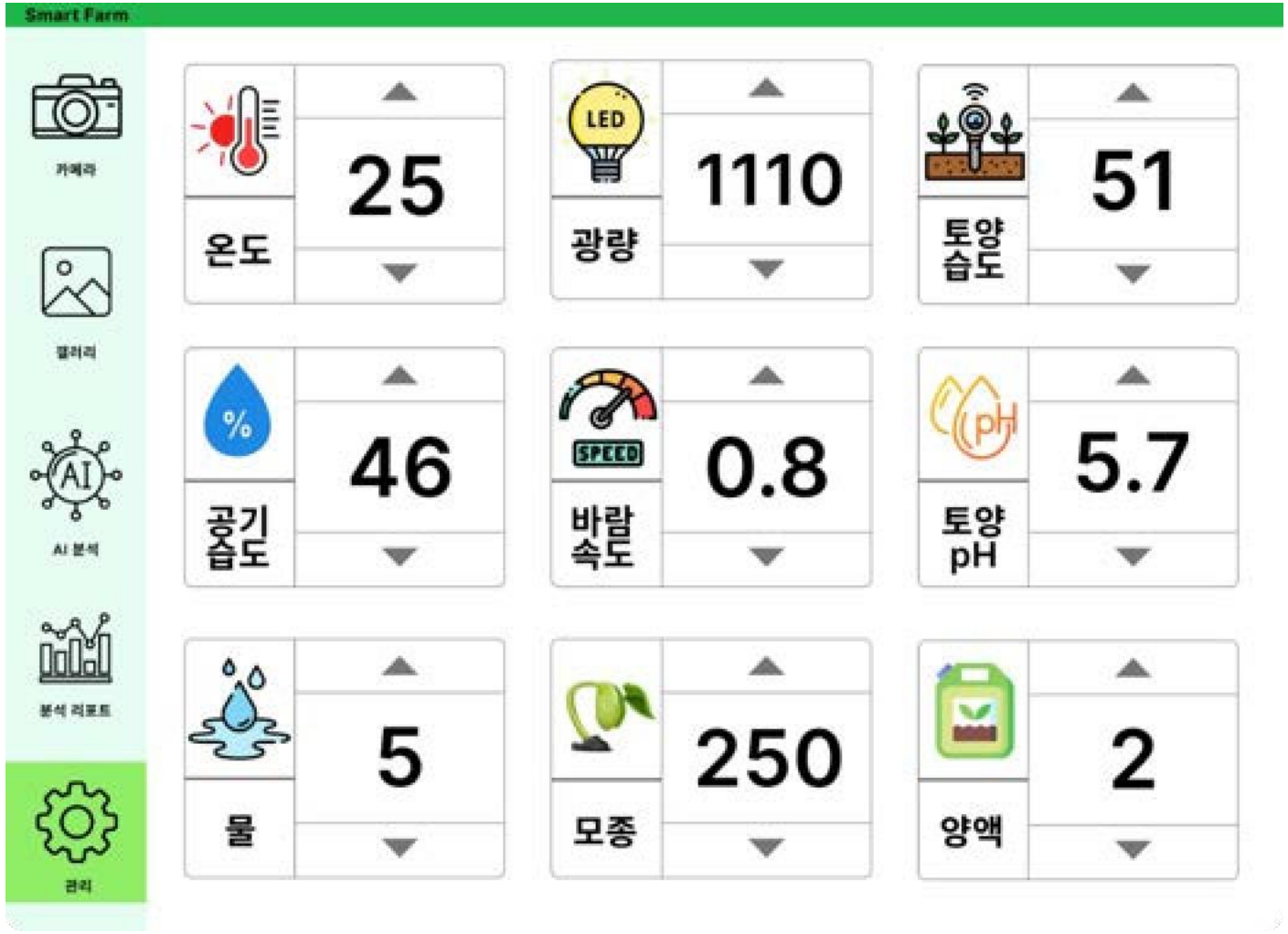
Farm Environment Management Base d on Analysis Report

RXO Co.,Ltd.
www.rxoworld.com

Farm environment management available

The conditions that this system can control

- Temperature
- Light intensity
- Soil humidity
- Air humidity
- Wind speed
- Soil pH
- Water
- Seedlings
- Nutrient solution



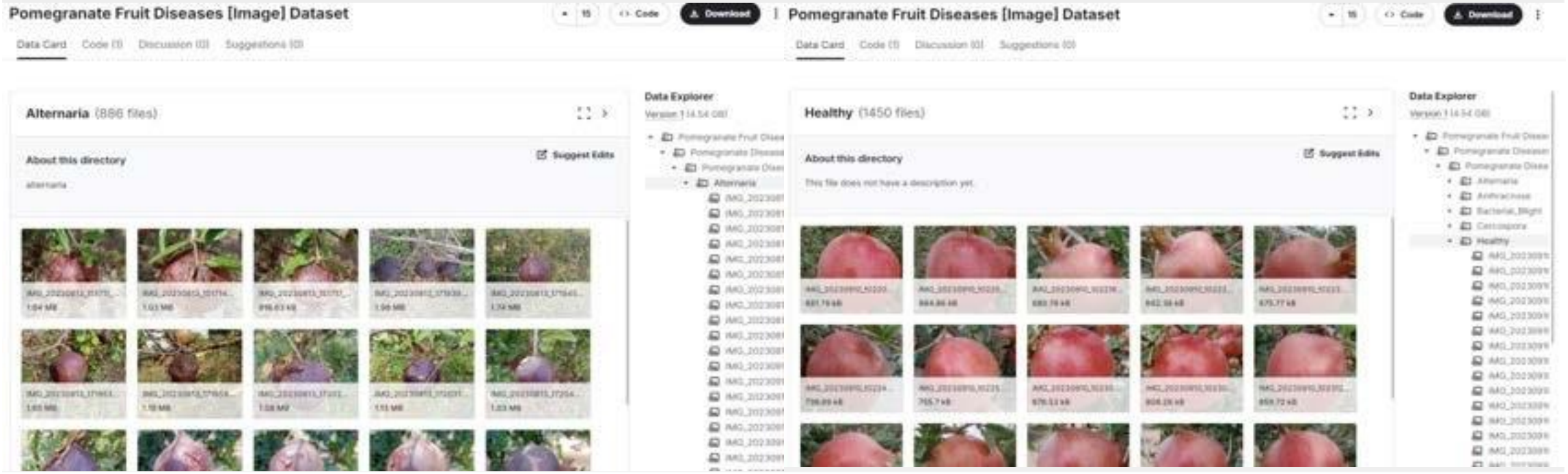
DATA

Kaggle - Pomegranate Fruit Diseases [Image] Dataset

(Acquire about 100,000, 3TB datasets including Kaggle)

Pomegranate Fruit Diseases [Image] Dataset https://www.kaggle.com/datasets/sujaykapadnis/pomegranate-fruit-diseases-dataset

We used a dataset of 5099 items classified into 5 types of pomegranate diseases that can be identified based on the appearance of the fruit.



AI-Deep Learning MODEL

Contrastive Language-Image Pretraining Model

CLIP is a multimodal model that learns the relationship between images and text for tasks like image classification and mutual search.

It boasts high performance from small data to large data.

Here are the benefits of using the CLIP model for pomegranate disease classification:

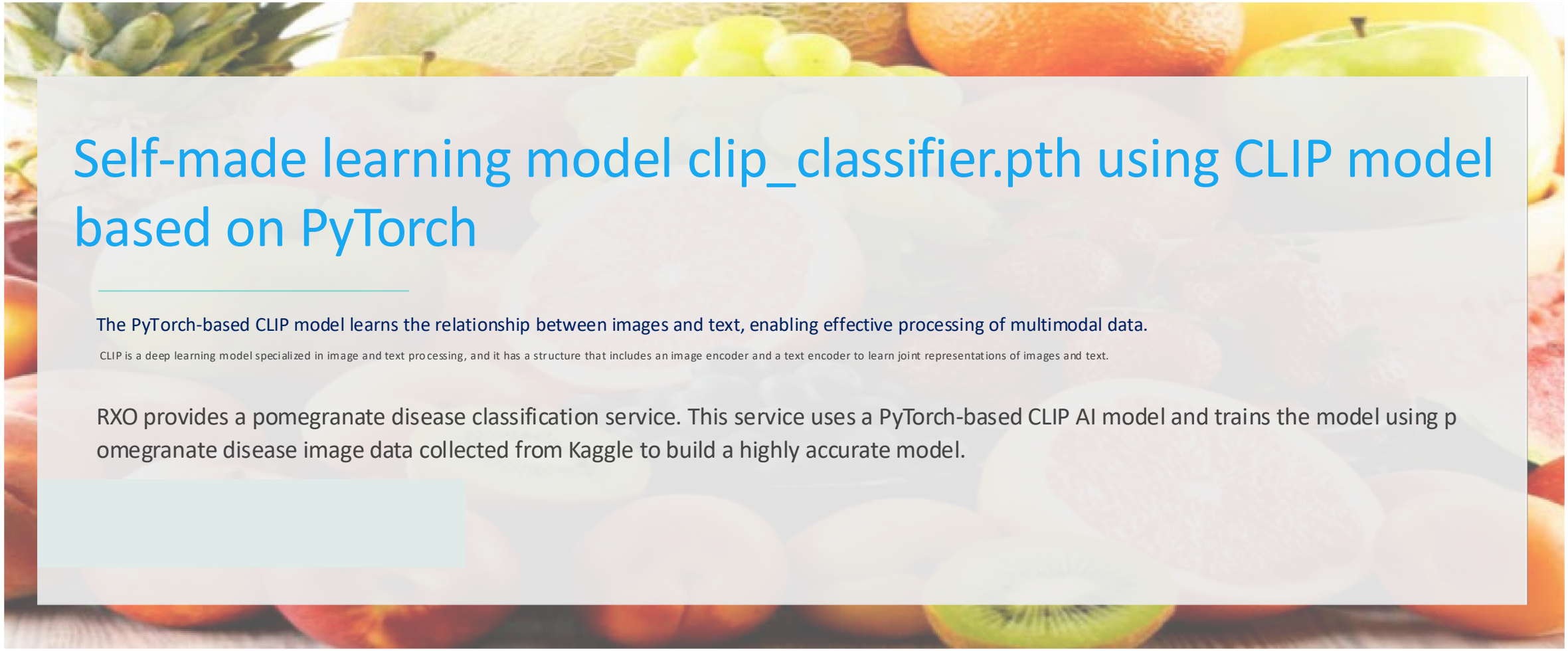
1.Multimodal Learning: CLIP can learn the relationship between images and text, allowing for more refined classification by analyzing both text descriptions and image data of pomegranate disease conditions simultaneously.

2.High Accuracy with Images and Text: CLIP can compare images and text to classify disease types and conditions more accurately. By learning both text descriptions a n d image features together, the prediction accuracy is improved.

3.Support for Diverse Disease Classifications: CLIP can process both image and text information, making it advantageous for classifying and detecting a broader range o f pomegranate diseases.

4. Efficient Data Utilization: CLIP can achieve effective learning even with limited data, making it useful for scenarios where pomegranate disease datasets are relatively small.

AI-Deep Learning MODEL



Self-made learning model clip_classifier.pth using CLIP model based on PyTorch

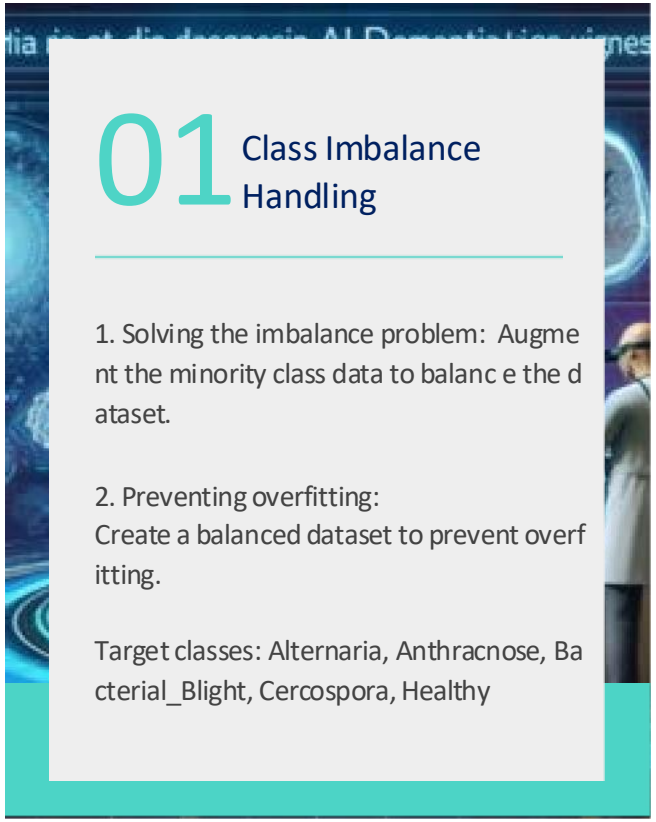
The PyTorch-based CLIP model learns the relationship between images and text, enabling effective processing of multimodal data.

CLIP is a deep learning model specialized in image and text processing, and it has a structure that includes an image encoder and a text encoder to learn joint representations of images and text.

RXO provides a pomegranate disease classification service. This service uses a PyTorch-based CLIP AI model and trains the model using p omegranate disease image data collected from Kaggle to build a highly accurate model.

Data preprocessing

Main data preproce
ssing

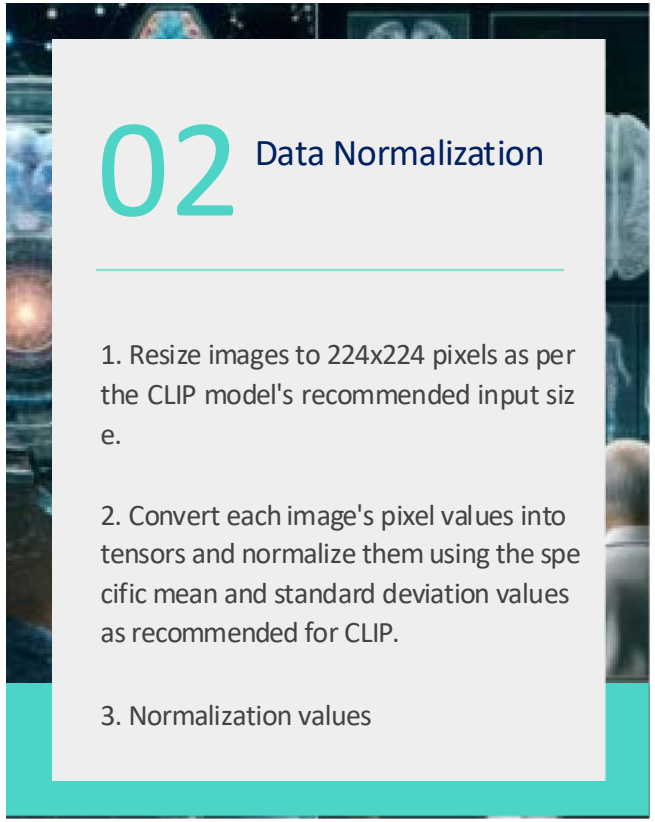


01 Class Imbalance Handling

1. Solving the imbalance problem: Augme nt the minority class data to balanc e the d ataset.

2. Preventing overfitting:
Create a balanced dataset to prevent overf itting.

Target classes: Alternaria, Anthracnose, Ba cterial_Blight, Cercospora, Healthy

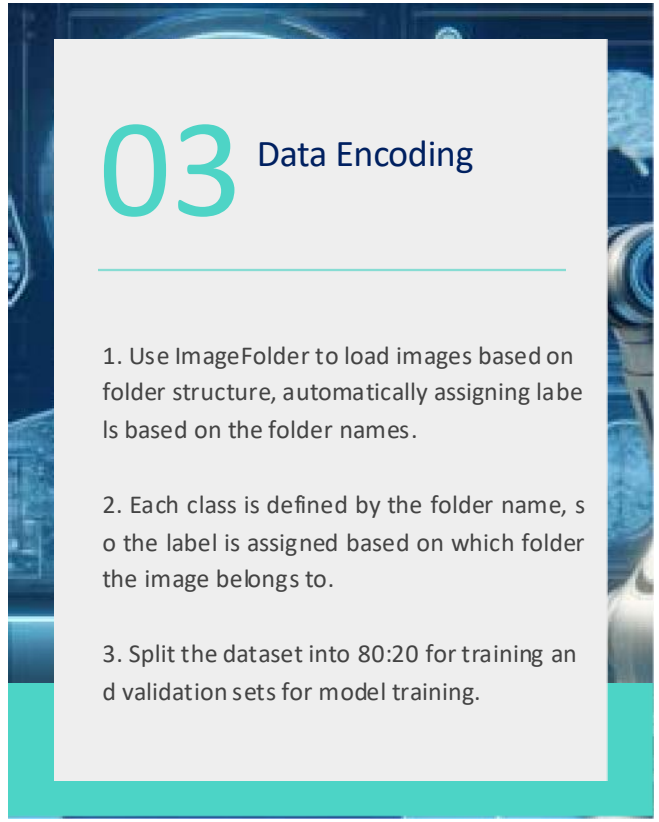


02 Data Normalization

1. Resize images to 224x224 pixels as per the CLIP model's recommended input siz e.

2. Convert each image's pixel values into tensors and normalize them using the spe cific mean and standard deviation values as recommended for CLIP.

3. Normalization values



03 Data Encoding

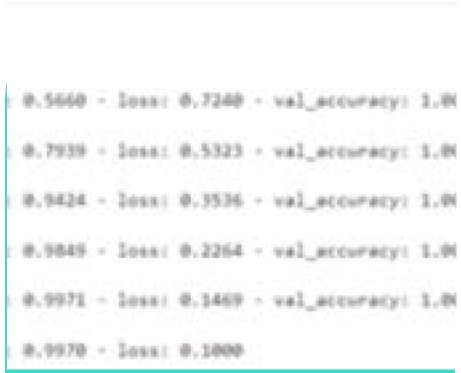
1. Use ImageFolder to load images based on folder structure, automatically assigning labe ls based on the folder names.

2. Each class is defined by the folder name, s o the label is assigned based on which folder the image belongs to.

3. Split the dataset into 80:20 for training an d validation sets for model training.

Model Evaluation I ndex

SmartFarm X RXO

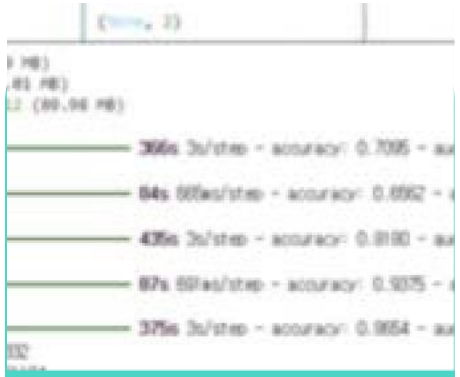


01 Use local CPU

Testing Accuracy = 99.71%

After training for 10 epochs usi ng a local CPU, the accuracy re ached 99%, indicating overfitti ng.
Since the model needs to classi fy new data effectively, we set a goal for improvement and pl an to enhance it further.

Overfitting



02 Use local GPU

Testing Accuracy = 86.54%

We trained using a local GPU wi th blocks that include dense lay ers, dropouts, and batch normal ization to enhance learning stab ility and prevent overfitting.
Since our goal is to achieve a sc ore of 90 or higher and an accur acy of at least 86%, we plan to f urther improve performance.

0.86

03 Using A100 GPU

F1_score = 0.8823
Testing Accuracy = 90.12%
Training was conducted using a V100 GPU, al ong with parameter modifications and the fol lowing techniques:
EarlyStopping : Stops training if there is no pe rformance improvement for a certain numbe r of epochs to prevent overfitting.
-ModelCheckpoint : Saves the best-performin g model to preserve the optimal model.
Additionally, the model was compiled using t he Adam optimizer and the Categorical Cross entropy loss function, successfully increasing training speed and improving accuracy to 94. 12%.

0.9012

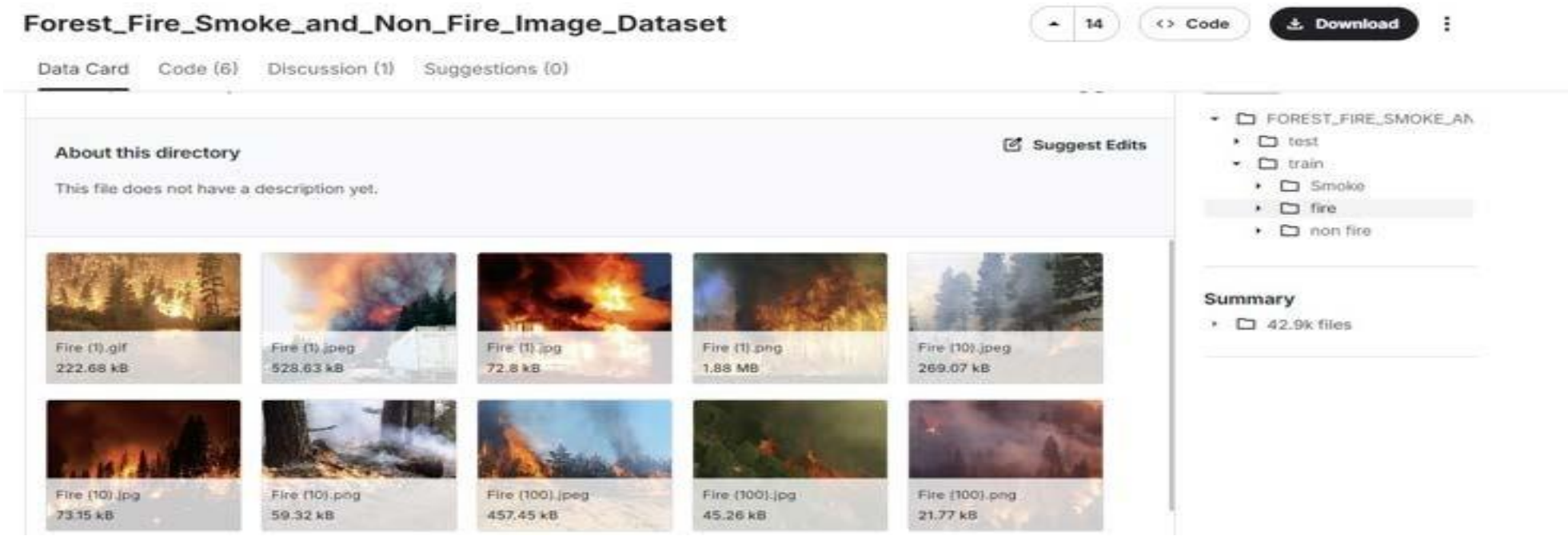
Fire Detection Feature

Detects fire hazards in real time by monitoring farms using a custom-trained model based on fire and smoke image data.

Helps detect dangers early and respond swiftly.

DATA

https://www.kaggle.com/datasets/amerzishminha/forest-fire-smoke-and-non-fire-image-dataset



yolov8n-cls.pt, Swin transformer

Model developed through fine-tuning

Fire classification web application

using image input

Real-time fire detection and classification

via RTSP camera

Tiny Flame Detection Feature

Detects small flames using a custom-trained model based on tiny flame image datasets.

Helps prevent small sparks from developing into large fires.

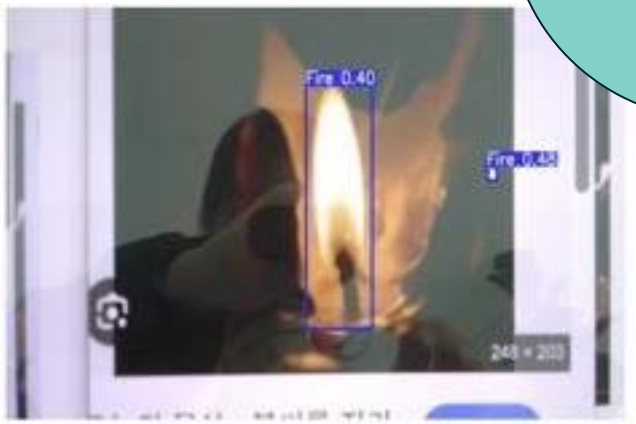
DATA

https://www.kaggle.com/datasets/sreemantabarman/flame-dataset-candlelightermatch-stick-flames

Tiny Flame Detection Feature

- yolov8n.pt fine tuning -

Bounding box
+
Probability
Display
included



Chatbot Function (for Smart Farm)

Creating a chatbot for smart farms by fine-tuning LLaMA 3.3.

Data

https://www.llama.com/llama-downloads/?utm_source=chatgpt.com

Llama 3 models

Text

Llama 3.3: 70B

- Multilingual open source large language model
- Experience 405B performance and quality at a fraction of the cost

*Licensed under Llama 3.3 Community License Agreement

Lightweight

Llama 3.2: 1B & 3B

- Lightweight and most cost-efficient models you can run anywhere on mobile and on edge devices
- Llama Guard 3 1B is included
- Quantized models available

*Licensed under Llama 3.2 Community License Agreement

Text

Llama 3.1: 405B & 8B

- Multilingual open source large language model
- Llama Guard 3 8B and Llama Prompt Guard 2 are included

*Licensed under Llama 3.1 Community License Agreement

Multimodal

Llama 3.2: 11B & 90B

- Open multimodal models that are flexible and can reason on high resolution images and output text
- Llama Guard 3 11B Vision is included

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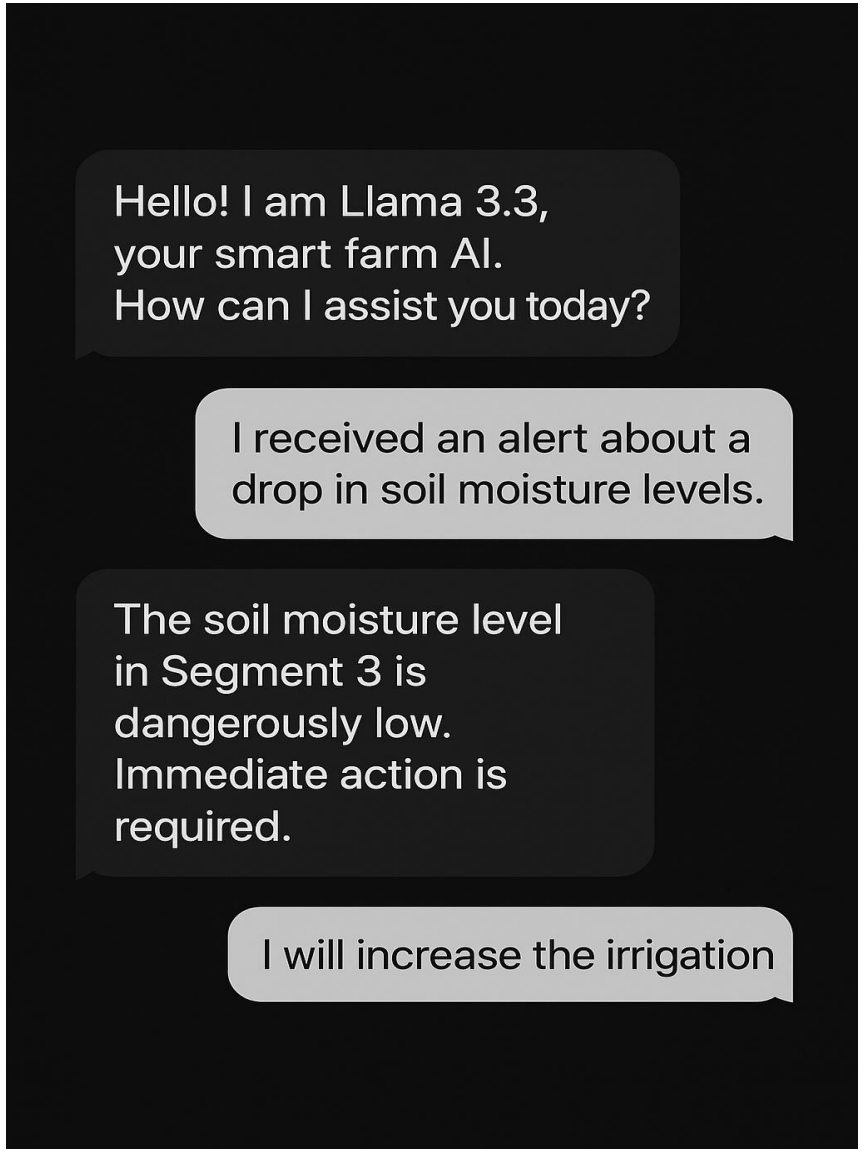
Chatbot Function

If you input information and photos about the crop, it will assess the crop's condition and provide feedback.

LLaMA 3.3



Future Plans

- Establishment of an Automated Crop Harvesting System
  - Automated Harvesting Robot
  - Quality Classification and Grading
- Establishment of Post-Harvest Management System
  - Automated Sorting and Packaging System
  - Management and Logistics Optimization

"

From farm automation to crop data-driven customized management,
SmartFarm provides an integrated solution on a single platform.

"


THANK YOU