greenojo
smart n sustainable solutions

Sustainable Agriculture

Greenojo is committed to shaping a smarter & sustainable future through advanced technology, innovative solutions, and expertise.

AgriBoost : AI-Driven Yield Optimization

AgriBoost from Greenojo is an advanced AI-driven platform designed to enhance agricultural productivity.

It leverages cutting-edge AI and machine learning algorithms to provide precise data-driven recommendations tailored to the unique conditions of each farm.

✓ Farmers face numerous challenges in optimizing crop yields, such as:

- Unpredictable weather patterns
- Soil health issues
- Pest infestations
- Inefficient use of resources

✓ Traditional farming methods often rely on intuition and experience, leading to suboptimal results and significant waste.

AgriBoost : AI-Driven Yield Optimization

Soil Health Analysis: Uses SoilGrids for comprehensive soil mapping and nutrient analysis.

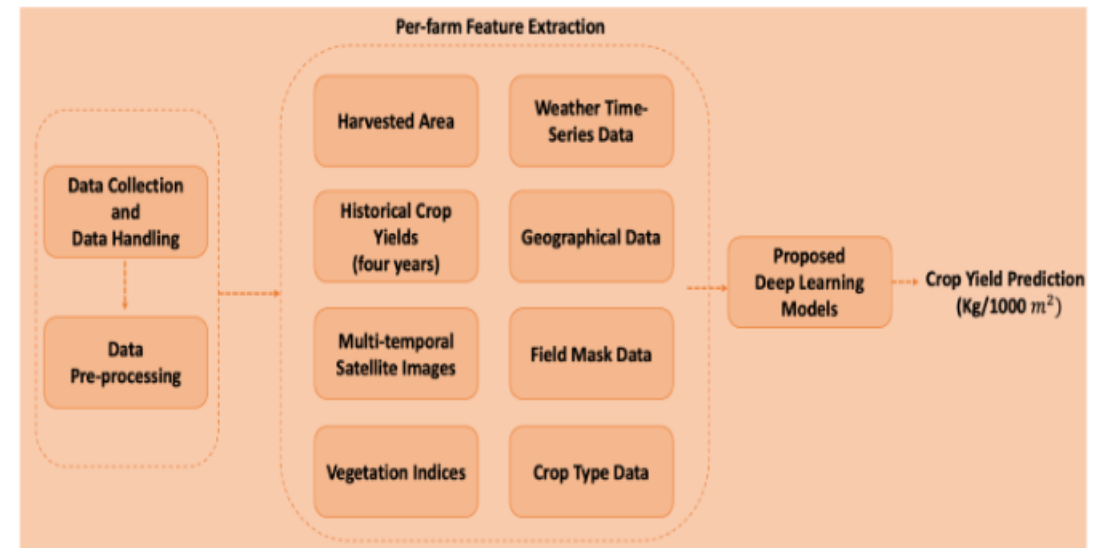Weather Prediction: Integrates OpenWeatherMap for accurate localized weather forecasts.

Crop Management: Employs TensorFlow and scikit-learn for optimizing planting schedules, pest control, and irrigation.
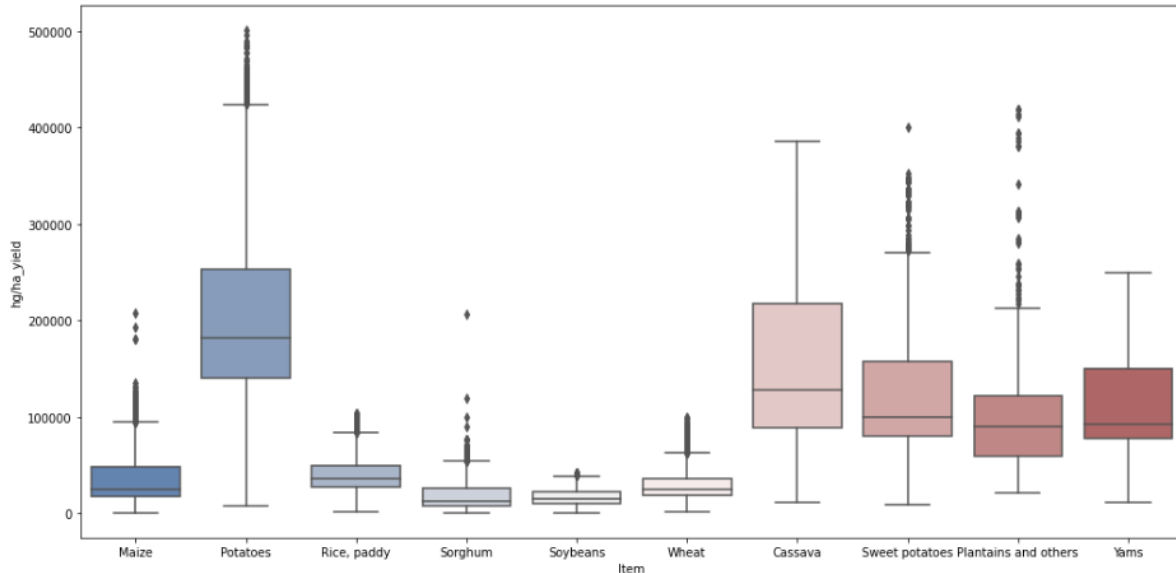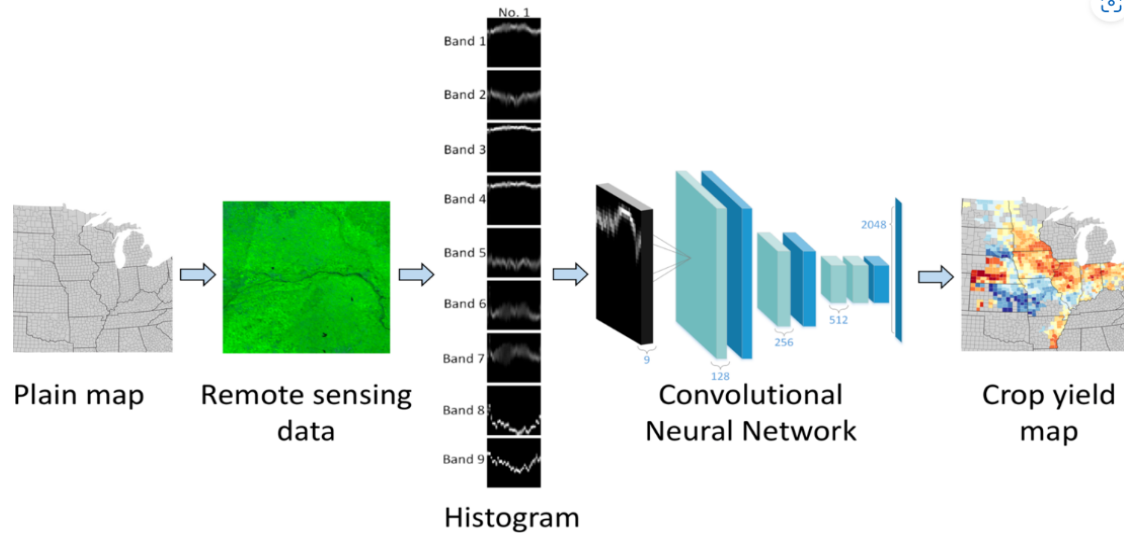
Drone and Satellite Imaging: Utilizes OpenDroneMap for real-time crop monitoring and health assessment.

- The primary goal of AgriBoost is to help farmers increase crop yields, optimize resource use, and promote sustainable farming practices.

- By providing data-driven insights and recommendations, AgriBoost aims to enhance productivity and reduce environmental impact.

Per-farm Feature Extraction

Data Collection and Data Handling → Data Pre-processing

Harvested Area · Weather Time-Series Data

Historical Crop Yields (four years) · Geographical Data

Multi-temporal Satellite Images · Field Mask Data

Vegetation Indices · Crop Type Data

Proposed Deep Learning Models → Crop Yield Prediction (Kg/1000 m^2)

AgriBoost : Business Value

Increased Yields: By providing data-driven insights, AgriBoost can help farmers increase their crop yields by up to 30%.

Resource Efficiency: Optimized use of water, fertilizers, and pesticides can reduce waste by up to 20%.

Environmental Sustainability: By minimizing resource waste and optimizing farming practices, AgriBoost contributes to more sustainable agricultural practices.

Cost Savings: Efficient resource utilization and increased productivity can result in significant cost savings.

Thank You

Building Sustainable Digital Enterprises