> Dashboard for Agriculture

(A Virtual assistant to help farmers)

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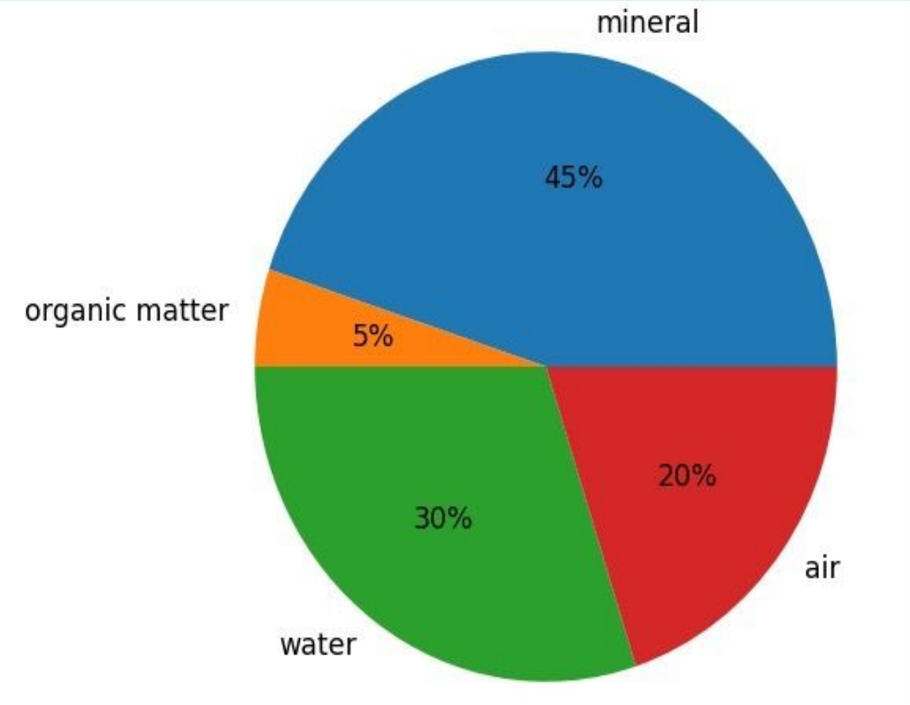
STARLIGHT

SOLUTION OVERVIEW

Aim: To empower smallholder farmers with accessible data and insights to optimize crop yields and manage resources effectively.



Target: Design an Agricultural Dashboard that utilizes satellite imagery , IOT sensors and image processing.

It monitors soil moisture, automates irrigation, and optimizes water usage to increase crop yield .

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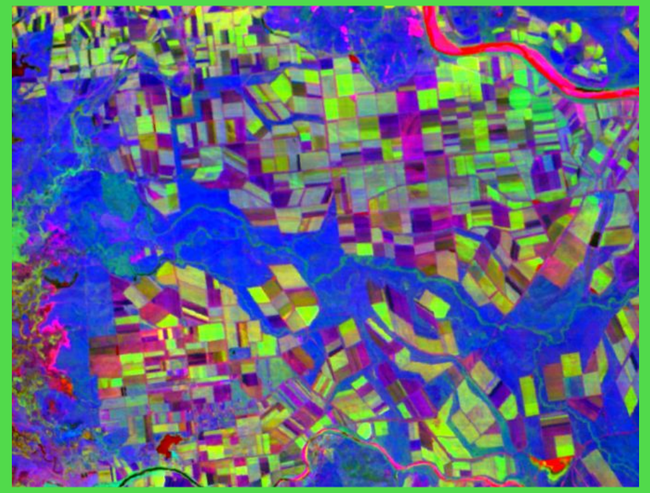
SOLUTION OVERVIEW

VISUAL UNDERSTANDING



- Image procession via satellites
- Image data is shared with servers
- Identified problems are sent to FARMOS App

PHYSICAL UNDERSTANDING

- IOT sensors are implemented in the farmland to understand the farm and crops physically
- This gives on ground understanding of the moisture and chemical content in the soil and helps farmers treat the soil accordingly

MARKET

- Connects the farmers directly to the market or consumers and sell the crops at consumer price

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TECHNICAL ARCHITECTURE

Tech stack

- **Frontend Technologies: (e.g., React, Typescript)**
- **Backend Technologies:(e.g., Node.js, Django, Flask)**
- **Database:(e.g., MySQL)**

SCALABILITY AND FUTURE SCOPE

- How your solution can handle increased load

- Architecture considerations:
  IOT sensors, Satellite services, cloud services, load balancing.

- Technologies that support scalability :
  Grouping of farmlands based on geolocation.

- Connecting farmers to the proper market will help bring more profit to farmers

FEASIBILITY

- Internet and digital connectivity challenges
- Strategies for overcoming these challenges
- Address environmental sustainability

>Team Details

Sucharita Chattopadhyay

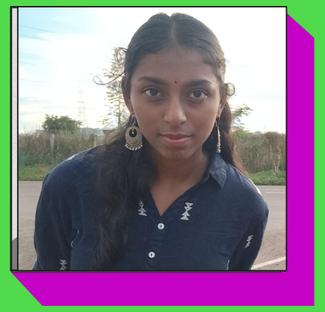
Student,
Vellore Institute of
Technology -AP

Rishab Kurapati

Student,
Vellore Institute of
Technology -AP

Jhanvi Mishra

Student,
Vellore Institute of
Technology -AP



Mydhili Gudimella

Student,
Vellore Institute of
Technology -AP

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Thanks for Joining