



AMITY UNIVERSITY
UTTAR PRADESH

AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

WEEKLY PROGRESS REPORT (WPR)

For the week commencing: 18/08/2025 – 24/08/2025

WPR 5

Enrollment Number: A41105222180 Program:

B-Tech CSE

Student Name: ABHISHEK KUMAR SHARMA

Faculty Guide's Name: Bhanu Prakash Lohani

Project Title: AI-Powered Smart Farming Assistant

TARGETS SET FOR THE WEEK

1. Train or obtain pre-trained model for crop suggestion (based on soil, season, etc.).
2. Integrate basic AI model in backend (Python/Node wrapper).
3. Test model locally with sample inputs.
4. Create API endpoint to serve AI predictions.
5. Connect AI response to frontend UI.

Achievements: Research & Planning Phase

1. Obtained and tested pre-trained crop recommendation model (input: soil type, season).
2. Integrated model into backend using Python Flask and connected via API.
3. Tested AI model with 10 sample inputs, accuracy ~85%.
4. Created API endpoint /recommend-crop and connected to frontend.
5. Displayed AI output on dashboard UI with dynamic rendering

FUTURE WORK PLANS

Expand AI functionalities (e.g., pest detection, yield prediction) in Week 6.