

FEATURE EXTRACTION AND TRAINING REPORT

FEATURE EXTRACTION PROCEDURE (E.g. down sampling an image to a resolution that is enough to discriminate it from others, down sampling a sound, extracting only corner points from an image using opencv,)	The dataset was split based on 'Crop_Type' to create specialized models. Numerical features (N, P, K, etc.) were used as input vectors and the 'Crop_Yield_ton_per_hectare' column was used as the "Target (y)".
FEATURE EXTRACTION SCRIPT(S) DIRECTORY URL (You will upload to somewhere, e.g. onedrive)	https://github.com/AGovem/ENG-346-project/blob/main/Crop_Yield_prediction_ai.py
MACHINE LEARNING MODEL TRAINED (Linear Regression may be enough)	Linear Regression for each crop type. %80 of the data used for training and remaining %20 used for test.
MACHINE LEARNING TRAINING CODE URL (You will upload to somewhere, e.g. onedrive, github, ..)	https://github.com/AGovem/ENG-346-project/blob/main/Crop_Yield_prediction_ai.py
TRAINED MODEL PARAMETERS FILE URL (You will upload to somewhere, e.g. onedrive)	https://github.com/AGovem/ENG-346-project/blob/main/model_parameters_data.txt

NOTE-1: Feature extraction is the process of transforming raw data into a simplified and informative set of features or attributes. This reduces data complexity and highlights the most relevant information making it easier for machine learning models to analyze and learn from the data efficiently. It plays an important role in improving model accuracy and reducing computational costs by focusing on essential aspects of the data.

NOTE-2: Don't forget to reserve some of the data for validation and some for testing, these data will not be used while training model.