



Data Preparation

Mounting the drive and loading image and mask datasets.





Data Visualization

Using the **Visualizer** class to display images and their corresponding masks.





Image Processing

Application of **filters** and **data augmentation** techniques to enhance image quality for segmentation.



Model Training

Setting up and training the **ResUNet** model for image segmentation.

Advanced Plot Segmentation in Precision Agriculture

This illustration details how modern computer vision techniques are applied to analyze and segment agricultural fields.





Final Results

Visualization of the final segmentation results.



Model Evaluation

Evaluating the model using the test set and metrics such as the Dice Coefficient.