

Image data:

- [Tomato Leaf Diseases Detect Dataset > Overview \(roboflow.com\)](#)
- Number of training data: 92 (31 test images, 61 validation images)
- Classes
 - 0: Bacterial Spot
 - 1: Early_Blight
 - 2: Healthy
 - 3: Late_blight
 - 4: Leaf Mold
 - 5: Target_Spot
 - 6: black spot

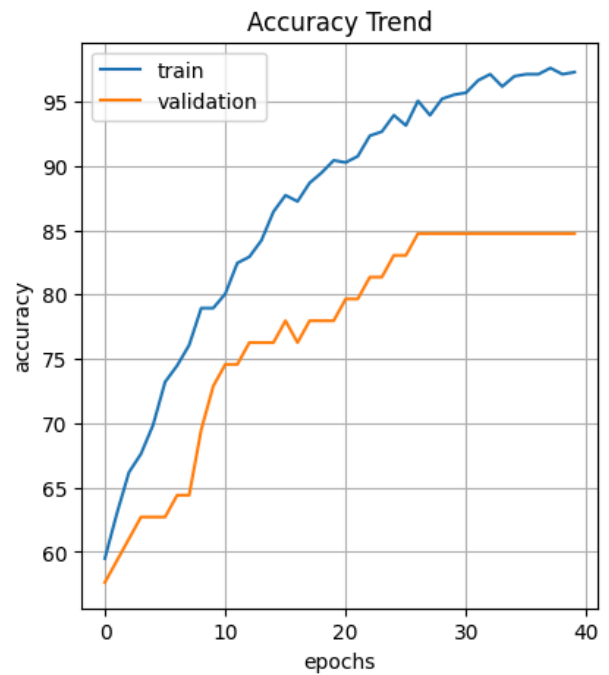
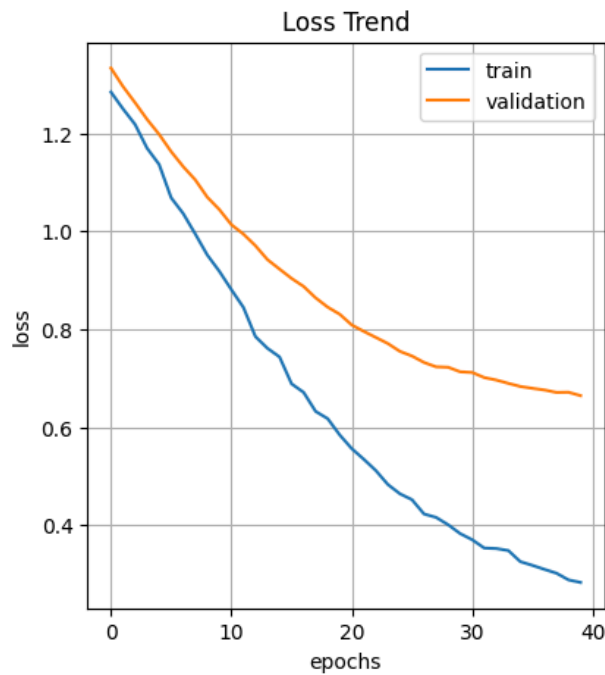


Deep learning model:

- The visionTransformer ([VisionTransformer — Torchvision 0.19 documentation \(pytorch.org\)](https://pytorch.org/docs/stable/torchvision/models/vision_transformer.html))
- Used pretrained weights ([vit_b_16 — Torchvision 0.19 documentation \(pytorch.org\)](https://pytorch.org/docs/stable/torchvision/models/vision_transformer.html#torchvision.models.vision_transformer.ViT_B_16))
- Modified header of model to classify 7 types of disease.
- Used Google colab with T4 GPU.
- With 40 epochs, it took 21 minutes to train.

Result:

- 97.29% training accuracy and 84.75 validation accuracy.



- Classification example.

