Week 1 Progress Report: Garbage Classification using EfficientNetV2B2

- Dataset organized into six categories: cardboard, glass, metal, paper, plastic, trash.

- Loaded dataset using TensorFlow's image_dataset_from_directory() with training and validation split.

- Built model architecture using EfficientNetV2B2 with a custom classification head.

- Compiled the model and initiated training using early stopping and model checkpointing.

- Training is in progress with promising early accuracy.

Next Steps:

- Complete full model training.

- Evaluate model using validation metrics and confusion matrix.

- Plot training vs validation accuracy/loss graphs.

- Deploy using Gradio for real-time image classification demo.