Overview

The code is designed to train two anomaly detection models (EfficientAD and PatchCore) on the MVTec dataset. It's structured with a main execution block and helper functions for training.

Data Preparation

Uses the MVTec dataset, specifically the 'leather' category. Image size is set to 256x256 pixels. Uses a batch size of 1 for training.

Models

EfficientAD: A recent, efficient anomaly detection model. PatchCore: Another popular anomaly detection model.

Training Process

Uses the Engine class from anomalib for training. Trains for 5 epochs (max_epochs=5). Saves the trained models in the specified results directory.

Evaluation

Evaluates the model on the test set (partially implemented through the Engine). Calculates ROC AUC score and Average Precision (not explicitly implemented

Inference

Provides functionality to save the trained model

Code Structure

- Data preprocessing (handled by MVTec data module)
- Model initialization
- Training loop
- Model saving