Guide for Running FastRecon++ Code

This guide provides instructions for setting up and running the FastRecon++ codebase for anomaly detection tasks.

Requirements

All required packages are listed in the requirements.txt file. To install them, run:

pip install -r requirements.txt

Input Format

- Input images should be in .jpg or .png format.
- Images must be organized into folders for training and testing phases.

Dataset Structure

- o **Training folder**:
 - train/good/ images with no defects.
- o **Testing folders**:
 - test/good/ normal test images.
 - test/<defect type>/ images with a specific defect type.

Parameters

The recommended parameters for each MVTec dataset category and our custom **Triangle** dataset are listed below:

DATASET	BATCH_SIZE (k)	CORESET_RATIO (s)	LAMBDA (λ)	Та	Th
TRIANGLE	8	0.05	0.3	1350	95
BOTTLE	8	0.05	0.3	4000	87
CARPET	8	0.05	0.3	1400	88
LEATHER	8	0.05	0.3	1400	88
TILE	8	0.05	0.3	7300	83
WOOD	8	0.05	2	2500	89
ZIPPER	8	0.05	0.2	2700	90
HAZELNUT	8	0.05	2	2800	96
CAPSULE	8	0.05	0.1	3000	93