
Recursive_Symmetry_Aware_Materials_Micro

Release 0.0.8

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Recursive Symmetry Aware Materials Microstructure Explorer is a tool to enable the recursive searching of images by creating projections of images and allowing interactive filtering. This tool is packaged with two feature extractors, a VGG-16 based model and a symmetry aware model based on ResNet-34

Installation

To install use `pip install Recursive_Symmetry_Aware_Materials_Microstructure_Explorer`

It is recommended that you install the package on a new conda env 1. `conda create -name bokeh` 2. `conda install -c anaconda ipykernel` 3. `python -m ipykernel install --user --name=bokeh` 4. `conda activate bokeh` 5. `pip install Recursive_Symmetry_Aware_Materials_Microstructure_Explorer`

Examples

We include one example of this package.

Within the repository download the two files in the Examples folder:

`Example_Image_Scraping_and_Collating.ipynb` - This is a notebook that scrapes images from google, this also has the code to collate the images from the folders.

`bokeh_server.py` - This contains the script for the graphical user interface.

To spin up a server,

`bokeh serve bokeh_server.py --args -p path`

The Bokeh demo will be served at the local host: http://localhost:5006/bokeh_server

INDICES AND TABLES

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