pydaily Documentation

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Pingjun Chen

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User Documentation

The documentation for pydaily is mainly organized by sub-modules.

CHAPTER 1

filesystem

1.1 find_ext_files

def find_ext_files(dir_name, ext): “”” Find all file with specific extension under designated directory.

“””

Arguments

dir_name: path of the designated directory

ext: specific file extension

1.2 overwrite_dir

def overwrite_dir(dir_name): “”” Create a directory, and delete it first if exist.

“””

Arguments

dir_name: path of the directory

1.3 check_mkdir

def check_mkdir(dir_name): “”” if directory not exist, create the directory

“””

Arguments

dir_name: path of the directory

1.4 batch_rename_files

def batch_rename_files(input_dir, save_dir, ext='.png', start_num=0, filename_len=5): “”” Rename all files with specific extention in an input directory to another directory with ordering numbers.

“””

Arguments

input_dir: directory that interested files in

save_dir: directory to save renamed files

ext: interested file extension

start_num: start number for first file

filename_len: length of renamed filename

1.5 batch_uuid_rename

def batch_uuid_rename(input_dir, save_dir, ext=".png"): “”” Rename all files with specific extension in an input directory to another directory with uuid string as filename.

“””

Arguments

input_dir: directory that interested files in

save_dir: directory to save renamed files

ext: interested file extension

1.6 is_image_file

def is_image_file(filename): “”” Check given filename is an image or not. Extensions of image file include: [‘.jpg’, ‘.JPG’, ‘.jpeg’, ‘.JPEG’, ‘.png’, ‘.PNG’, ‘.ppm’, ‘.PPM’, ‘.bmp’, ‘.BMP’, ‘tif’, ‘TIF’, ‘tiff’, ‘TIFF’,]

“””

Arguments

filename: name or path of given file

CHAPTER 2

format

2.1 json_to_dict

def json_to_dict(json_path): “”” Load json file as dictionary.

“”””

2.2 dict_to_json

def dict_to_json(data_dict, json_path): “”” Save dictionary to json file.

“”””

2.3 csv_to_dict

def csv_to_dict(csv_path): “”” Load csv to python dictionary.

“”””

2.4 dict_to_csv

:: def dict_to_csv(data_dict, csv_path):

“”” Save python dictionary to csv file.

“”””

2.5 pkl_to_dict

def pkl_to_dict(pkl_path): “”” Load pickle file as python dictionary

“””

2.6 dict_to_pkl

def dict_to_pkl(data_dict, pkl_path): “”” Save dictionary data as pickle file

“””

2.7 h5_to_dict

def h5_to_dict(h5_path): “”” Load h5 to python dictionary.

“””

2.8 dict_to_h5

def dict_to_h5(data_dict, h5_path): “”” Save python dictionary to h5 file.

“””

2.9 txt_to_list

def txt_to_list(txt_path): “”” Load text file as list

“””

2.10 list_to_txt

def list_to_txt(data_list, txt_path): “”” Save python list to text file

“””

CHAPTER 3

log

3.1 Logger

class Logger(object): “”” Logging to terminal and file.

“””

CHAPTER 4

tic

4.1 current_time

def current_time(): “”” Provide current time as YYYY-MM-DD_HH-MM-SS

“”””

4.2 time_to_str

def time_to_str(delta_t, mode=”min”): “””Convert elapsed time to string representation

delta_t: time difference Elapsed time

mode: str Time representation manner, by “minitues” or “seconds”.

delta_str: str Elapsed time string representation

```
>>> from timeit import default_timer as timer
>>> start = timer()
>>> end = timer()
>>> elapsed_time_str = time_to_str(end - start, "min")
```

“”””

CHAPTER 5

About pydaily

pydaily package is a collection of functions and utilities used in my daily research. I organize all these functions together mainly for following reasons.

1. Figure out how to write a python package and upload to pypi.
2. Avoid reinventing the wheel all the time. After all, life is short.
3. Expect this package can be of help to the community, especially those in working in computer vision, machine learning, biomedical image analysis. I also look forward for contributors to improve the package.
4. For the spirit of open source. Sharing is growing.