

watermark : An IPython magic extension for printing date and time stamps, version numbers, and hardware information.

- download watermark extension

```
pip install watermark
```

```
Requirement already satisfied: watermark in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (2.4.3)
Requirement already satisfied: ipython>=6.0 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from watermark) (8.20.0)
Requirement already satisfied: importlib-metadata>=1.4 in c:\users\
rajen\anaconda3\envs\notebook\lib\site-packages (from watermark)
(7.0.1)
Requirement already satisfied: setuptools in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from watermark) (68.2.2)
Requirement already satisfied: zipp>=0.5 in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from importlib-metadata>=1.4-
>watermark) (3.17.0)
Requirement already satisfied: decorator in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from ipython>=6.0->watermark) (5.1.1)
Requirement already satisfied: jedi>=0.16 in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from ipython>=6.0->watermark)
(0.18.1)
Requirement already satisfied: matplotlib-inline in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from ipython>=6.0-
>watermark) (0.1.6)
Requirement already satisfied: prompt-toolkit<3.1.0,>=3.0.41 in c:\
users\rajen\anaconda3\envs\notebook\lib\site-packages (from
ipython>=6.0->watermark) (3.0.43)
Requirement already satisfied: pygments>=2.4.0 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from ipython>=6.0-
>watermark) (2.15.1)
Requirement already satisfied: stack-data in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from ipython>=6.0->watermark) (0.2.0)
Requirement already satisfied: traitlets>=5 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from ipython>=6.0-
>watermark) (5.7.1)
Requirement already satisfied: colorama in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from ipython>=6.0->watermark) (0.4.6)
Requirement already satisfied: parso<0.9.0,>=0.8.0 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from jedi>=0.16-
>ipython>=6.0->watermark) (0.8.3)
Requirement already satisfied: wcwidth in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from prompt-toolkit<3.1.0,>=3.0.41-
>ipython>=6.0->watermark) (0.2.5)
Requirement already satisfied: executing in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from stack-data->ipython>=6.0-
>watermark) (0.8.3)
Requirement already satisfied: asttokens in c:\users\rajen\anaconda3\
```

```

envs\notebook\lib\site-packages (from stack-data->ipython>=6.0-
>watermark) (2.0.5)
Requirement already satisfied: pure-eval in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from stack-data->ipython>=6.0-
>watermark) (0.2.2)
Requirement already satisfied: six in c:\users\rajen\anaconda3\envs\
notebook\lib\site-packages (from asttokens->stack-data->ipython>=6.0-
>watermark) (1.16.0)
Note: you may need to restart the kernel to use updated packages.

```

- load extension in notebook

```
%load_ext watermark
```

- details of arguments used in watermark

```
%watermark?
```

```
Docstring:
```

```
::
```

```

%watermark [-a AUTHOR] [-gu GITHUB_USERNAME] [-e EMAIL] [-ws
WEBSITE] [-d] [-n] [-t] [-i] [-z] [-u]
          [-c CUSTOM_TIME] [-v] [-p PACKAGES] [-co] [-h] [-m]
[-g] [-r] [-b] [-w] [-iv] [--gpu]

```

IPython magic function to print date/time stamps and various system information.

options:

```

-a AUTHOR, --author AUTHOR
                        prints author name
-gu GITHUB_USERNAME, --github_username GITHUB_USERNAME
                        prints author github username
-e EMAIL, --email EMAIL
                        prints author email
-ws WEBSITE, --website WEBSITE
                        prints author or project website
-d, --date              prints current date as YYYY-mm-dd
-n, --datetime          prints date with abbrev. day and month names
-t, --time              prints current time as HH-MM-SS
-i, --iso8601           prints the combined date and time including
the time zone in the ISO 8601 standard with UTC
                        offset
-z, --timezone          appends the local time zone
-u, --updated            appends a string "Last updated: "
-c CUSTOM_TIME, --custom_time CUSTOM_TIME
                        prints a valid strftime() string
-v, --python            prints Python and IPython version
-p PACKAGES, --packages PACKAGES

```

	prints versions of specified Python modules
and packages	
-co, --conda	prints name of current conda environment
-h, --hostname	prints the host name
-m, --machine	prints system and machine info
-g, --githash	prints current Git commit hash
-r, --gitrepo	prints current Git remote address
-b, --gitbranch	prints current Git branch
-w, --watermark	prints the current version of watermark
-iv, --iversions	prints the name/version of all imported
modules	
--gpu	prints GPU information (currently limited to
	NVIDIA GPUs), if available
File:	c:\users\rajen\anaconda3\envs\notebook\lib\site-packages\
	watermark\magic.py

- last updated date and time

```
%watermark -u -t -d
```

```
Last updated: 2024-02-18 14:46:13
```

- all together

```
%watermark -utd
```

```
Last updated: 2024-02-18 14:46:48
```

```
%watermark -un
```

```
Last updated: Sun Feb 18 2024
```

- author name, updated time with github username

```
%watermark -u -n -a "Rajendra Kumar R" -gu "ems-rajen"
```

```
Author: Rajendra Kumar R
```

```
Github username: ems-rajen
```

```
Last updated: Sun Feb 18 2024
```

- see python version

```
%watermark -v
```

```
Python implementation: CPython
```

```
Python version : 3.11.7
```

```
IPython version      : 8.20.0
```

- machine detailed

```
%watermark -m
```

```
Compiler      : MSC v.1916 64 bit (AMD64)
OS            : Windows
Release       : 10
Machine       : AMD64
Processor     : Intel64 Family 6 Model 154 Stepping 4, GenuineIntel
CPU cores     : 12
Architecture: 64bit
```

- combined all stuff together

```
%watermark -a "Rajendra R" -udvm
```

```
Author: Rajendra R
```

```
Last updated: 2024-02-18
```

```
Python implementation: CPython
Python version        : 3.11.7
IPython version       : 8.20.0
```

```
Compiler      : MSC v.1916 64 bit (AMD64)
OS            : Windows
Release       : 10
Machine       : AMD64
Processor     : Intel64 Family 6 Model 154 Stepping 4, GenuineIntel
CPU cores     : 12
Architecture: 64bit
```

- if you import many kackages then you also can use it to see version of all of them

```
pip install numpy
```

```
Requirement already satisfied: numpy in c:\users\rajen\anaconda3\envs\notebook\lib\site-packages (1.26.4)
```

```
Note: you may need to restart the kernel to use updated packages.
```

```
pip install pandas
```

```
Requirement already satisfied: pandas in c:\users\rajen\anaconda3\envs\notebook\lib\site-packages (2.2.0)
```

```
Requirement already satisfied: numpy<2,>=1.23.2 in c:\users\rajen\anaconda3\envs\notebook\lib\site-packages (from pandas) (1.26.4)
```

```
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\
```

```
rajen\anaconda3\envs\notebook\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from pandas) (2023.3.post1)
Requirement already satisfied: tzdata>=2022.7 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from pandas) (2024.1)
Requirement already satisfied: six>=1.5 in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from python-dateutil>=2.8.2->pandas)
(1.16.0)
```

Note: you may need to restart the kernel to use updated packages.

```
pip install matplotlib
```

```
Requirement already satisfied: matplotlib in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (3.8.3)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (1.2.0)
Requirement already satisfied: cycler>=0.10 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (4.49.0)
Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (1.4.5)
Requirement already satisfied: numpy<2,>=1.21 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (1.26.4)
Requirement already satisfied: packaging>=20.0 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (23.1)
Requirement already satisfied: pillow>=8 in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from matplotlib) (10.2.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (3.1.1)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\rajen\
anaconda3\envs\notebook\lib\site-packages (from matplotlib) (2.8.2)
Requirement already satisfied: six>=1.5 in c:\users\rajen\anaconda3\
envs\notebook\lib\site-packages (from python-dateutil>=2.7-
>matplotlib) (1.16.0)
```

Note: you may need to restart the kernel to use updated packages.

```
import pandas
import numpy
import matplotlib
```

```
%watermark -iv
```

```
pandas      : 2.2.0
matplotlib: 3.8.3
numpy       : 1.26.4
```

- if you restart ur kernal and all variables are gone then you can use it directly

```
import watermark.watermark as watermark
watermark(iversions = True, globals_ = globals())
'pandas      : 2.2.0\nmatplotlib: 3.8.3\nnumpy      : 1.26.4\n'
```

Reference :

- [Github](#)