

Installation Guide

This guide explains creating and installing pyFish package.

If you don't have Anaconda installed, you can do so from [Anaconda Website](#)

Step 1 : Clone the git repo

Open the terminal in your preferred directory and execute the below command to clone the repo

```
git clone https://github.com/tee-lab/pyFish.git
```

```
(base) TEE Lab:~/Desktop/pyFish_installation$ git clone https://github.com/tee-lab/pyFish.git
```

After cloning the terminal should look like this

```
(base) TEE Lab:~/Desktop/pyFish_installation$ git clone https://github.com/tee-lab/pyFish.git
Cloning into 'pyFish'...
remote: Enumerating objects: 93, done.
remote: Counting objects: 100% (93/93), done.
remote: Compressing objects: 100% (65/65), done.
remote: Total 1237 (delta 54), reused 63 (delta 28), pack-reused 1144
Receiving objects: 100% (1237/1237), 95.08 MiB | 6.10 MiB/s, done.
Resolving deltas: 100% (730/730), done.
(base) TEE Lab:~/Desktop/pyFish_installation$
```

Step 2 : Change the directory to pyFish

```
cd pyFish
```

```
(base) TEE Lab:~/Desktop/pyFish_installation$ cd pyFish/
```

Typing `ls` should show the following content

```
(base) TEE Lab:~/Desktop/pyFish_installation/pyFish$ ls
environment.yml  MANIFEST.in  pyFish      README.md      setup.cfg
LICENSE.txt     notebooks   pyproject.toml  requirements.txt  setup.py
(base) TEE Lab:~/Desktop/pyFish_installation/pyFish$
```

Step 3 : Create python environment

```
conda env create -f environment.yml
```

```
(base) TEE Lab:~/Desktop/pyFish_installation/pyFish$ conda env create -f environment.yml
```

Now, an environment named `pyFish` should be created

```
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate pyFish
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) TEE Lab:~/Desktop/pyFish_installation/pyFish$
```

Step 4 : Activate pyFish environment

```
conda activate pyFish
```

The (pyFish) should appear in the terminal.

```
(base) TEE Lab:~/Desktop/pyFish_installation/pyFish$ conda activate pyFish
(pyFish) TEE Lab:~/Desktop/pyFish_installation/pyFish$
```

Step 5 : Install pyFish

```
python -m pip install .
```

```
(pyFish) TEE Lab:~/Desktop/pyFish_installation/pyFish$ python -m pip install .
```

If you see a similar output at the end then the package is successfully installed

```
Successfully built pyFish pylustrator
Installing collected packages: pillow, numpy, kiwisolver, cyclor, tifffile, scipy, qtpy, PyWavelets,
pytz, PyQt5-sip, networkx, matplotlib, imageio, scikit-image, retrying, qtawesome, PyQt5, patsy, pand
as, natsort, tqdm, statsmodels, seaborn, pylustrator, plotly, pyFish
Successfully installed PyQt5-5.15.2 PyQt5-sip-12.8.1 PyWavelets-1.1.1 cyclor-0.10.0 imageio-2.9.0 kiw
isolver-1.3.1 matplotlib-3.2.2 natsort-7.1.1 networkx-2.5 numpy-1.19.1 pandas-1.2.2 patsy-0.5.1 pillo
w-8.1.0 plotly-4.14.3 pyFish-1.20 pylustrator-1.0.0 pytz-2021.1 qtawesome-1.0.2 qtpy-1.9.0 retrying-1
.3.3 scikit-image-0.18.1 scipy-1.5.2 seaborn-0.10.1 statsmodels-0.11.1 tifffile-2021.2.1 tqdm-4.48.2
(pyFish) TEE Lab:~/Desktop/pyFish_installation/pyFish$
```

You can run the notebook files using jupyter notebook (or jupyter lab)

jupyter notebook

```
(pyFish) TEE Lab:~/Desktop/pyFish_installation/pyFish$ jupyter notebook
[I 04:46:39.265 NotebookApp] The port 8888 is already in use, trying another port.
[I 04:46:39.732 NotebookApp] JupyterLab extension loaded from /home/ashwin/anaconda3/envs/pyFish/lib/
python3.7/site-packages/jupyterlab
```

This should open the notebook application in the browser, click on `notebooks` folder and open the .ipynb notebook file.

After opening the file, click on the cell and press `Shift+Enter` to execute that cell and move to the next.