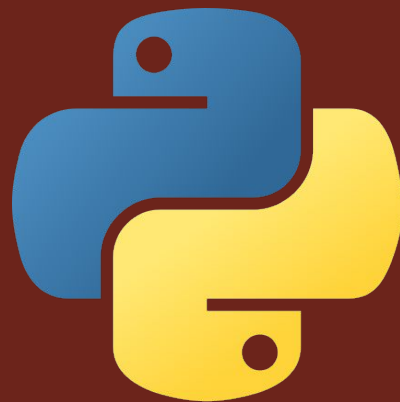


How to Manage Multiple Python Versions and Virtual Environments

pyenv + venv



Multiple Python Versions



Use Python Version Manager: [pyenv](#)

Install py versions: **pyenv install**

```
$ pyenv install 3.6.5
$ pyenv install 3.7.12
$ pyenv install pypy3.9-7.3.9
$ pyenv install 3.10.6
$ pyenv versions
* system (set by /Users/scgupta/.pyenv/version)
  3.6.5
  3.7.12
  3.10.6
  pypy3.9-7.3.9
```

Uninstall py versions: **pyenv uninstall**

```
$ pyenv uninstall 3.6.5
```

Setting Python Version



Global: default version on the machine

```
$ pyenv global 3.10.6  
$ pyenv which python  
/Users/scgupta/.pyenv/versions/3.10.6/bin/python
```

Local: version for current dir and subdirs

```
$ cd projdir  
$ pyenv local 3.7.12  
$ pyenv which python  
/Users/scgupta/.pyenv/versions/3.7.12/bin/python
```

Shell: version only in the current shell

```
$ pyenv shell pypy3.9-7.3.9  
$ pyenv which python  
/Users/scgupta/.pyenv/versions/pypy3.9-7.3.9/bin/  
python
```

Virtual Environments



Create Virtual Environment

```
$ pyenv virtualenv 3.7.12 kaggle
$ pyenv versions
System
* 3.7.12 (set by /Users/scgupta/.pyenv/version)
  3.7.12/envs/kaggle
  3.10.6
  kaggle
  pypy3.9-7.3.9
```

Set a Virtual Environment for a project

```
$ cd projdir
$ pyenv local kaggle
$ pyenv which python
/Users/scgupta/.pyenv/versions/kaggle/bin/python
```

Activate Virtual Environment for a shell session

```
$ pyenv activate kaggle
$ pyenv deactivate
```



pyenv + venv

If you want the virtual environment to be in a subdir of the project:

- Use pyenv for Python versions
- And [venv](#) for Virtual Environments

```
$ cd projdir
$ which python
/Users/scgupta/.pyenv/shims/python
$ pyenv which python
/Users/scgupta/.pyenv/versions/3.10.6/bin/python

$ python -m venv .venv
$ source ../.venv/bin/activate
$ which python
/Users/scgupta/projdir/.venv/bin/python
$ pyenv which python
/Users/scgupta/.pyenv/versions/3.10.6/bin/python
```



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