

Use Python in R with Reticulate

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1 Reticulate Basics

Go to the [RMD](#), [R](#), [PDF](#), or [HTML](#) version of this file. Go back to [fan's REconTools Package](#), [R Code Examples](#) Repository ([bookdown site](#)), or [Intro Stats with R](#) Repository ([bookdown site](#)).

1.1 Basic Python Tests with RMD

Could specify: `python`, `engine.path` = “C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe”, this is already set inside Rprofile: `knitr::opts_chunk$set(engine.path = “C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe”)`

```
1+1
```

```
## 2
```

1.2 Install and Python Path

Install reticulate from github directly to get latest version: `devtools::install_github(“rstudio/reticulate”)`

Check python version on computer:

```
Sys.which('python')
```

```
##                                python
## "C:\\PROGRA~3\\ANACON~1\\envs\\wk_pyfan\\python.exe"
```

After installing reticulate, load in the library: `library(reticulate)`. With “`py_config()`” to see python config. First time, might generate “No non-system installation of Python could be found.” and ask if want to install Miniconda. Answer NO.

Correct outputs upon checking `py_config()`:

```
python:      C:/ProgramData/Anaconda3/python.exe
libpython:   C:/ProgramData/Anaconda3/python37.dll
pythonhome:  C:/ProgramData/Anaconda3
version:     3.7.9 (default, Aug 31 2020, 17:10:11) [MSC v.1916 64 bit (AMD64)]
Architecture: 64bit
numpy:       C:/ProgramData/Anaconda3/Lib/site-packages/numpy
numpy_version: 1.19.1
```

python versions found:

```
C:/ProgramData/Anaconda3/python.exe
C:/ProgramData/Anaconda3/envs/wk_cgefi/python.exe
C:/ProgramData/Anaconda3/envs/wk_jinja/python.exe
C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe
```

Set which python to use:

```
# Sys.setenv(RETICULATE_PYTHON = "C:/programdata/Anaconda3/python.exe")
# Sys.setenv(RETICULATE_PYTHON = "C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe")
library(reticulate)
# What is the python config
py_config()
```

```
## python:      C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe
## libpython:   C:/ProgramData/Anaconda3/envs/wk_pyfan/python38.dll
## pythonhome:  C:/ProgramData/Anaconda3/envs/wk_pyfan
## version:     3.8.5 (default, Sep  3 2020, 21:29:08) [MSC v.1916 64 bit (AMD64)]
## Architecture: 64bit
## numpy:       C:/ProgramData/Anaconda3/envs/wk_pyfan/Lib/site-packages/numpy
## numpy_version: 1.19.1
##
## NOTE: Python version was forced by use_python function
```

```
# set python
# use_python("C:/programdata/Anaconda3/python.exe")
# use_python("C:/ProgramData/Anaconda3/envs/wk_pyfan/python.exe")
use_condaenv('wk_pyfan')
# Sys.which('python')
py_run_string('print(1+1)')
```

1.3 Error

1.3.1 py_call_impl error

The error appeared when calling any python operations, including “1+1”, resolved after installing reticulate from github: `devtools::install_github("rstudio/reticulate")`

```
Error in py_call_impl(callable, dots$args, dots$keywords) :
  TypeError: use() got an unexpected keyword argument 'warn'
```