Keras Installation Guide

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Overview

- reticulate allows one to call python from R.
- Keras is a high-level neural networks API.
- Keras (the R package) allows one to interface with the python Keras API.

Installation steps

General procedures:

1. Removing previous installation of `reticulate`, `tensorflow` and `keras`.

```
remove.packages(c("keras","tensorflow","reticulate"))
```

You might see an error message for each package that has not been installed, i.e. there's nothing to remove. Don't worry, R will remove what it can. 2. Install the R package `keras` anew.

```
install.packages("keras")
```

3. Install specific `python` implementations of `tensorflow`. This is a bit more involved and detailed in the next slide.

Install Miniconda

- ▶ Anaconda is a distribution of Python.
- ▶ Miniconda is a compactified version with the minimal content needed for the rest of this installation.
- ▶ Due to some technicalities, you must install Miniconda to a path **without** space. An example is:

```
C:/F71RA-Miniconda/
```

Create a folder in that directory (or one of your own choosing), then come back to the next step.

- ▶ The rest of the installation can be installed as follows:

```
Sys.setenv(
  RETICULATE_AUTOCONFIGURE='FALSE',
  RETICULATE_MINICONDA_PATH="C:/F71RA-Miniconda/",mustWork = FALSE
)
source(system.file("helpers", "install.R", package = "ISLR2"))
install_miniconda_and_tensorflow()
```