

# Installation of the R package nestedKriging

Prior to package installation, it is recommended that you update your system and install packages Rcpp, RcppArmadillo, RhpcBLASctl, DiceKriging (and Rtools, for Windows users). The steps below give more detailed explanations:

## 1. Update your system

## 2. For Windows users: install Rtools

If you use Windows operating system, you have to install Rtools (if not yet installed):

<https://cran.r-project.org/bin/windows/Rtools>

## 3. Install following packages from CRAN: Rcpp, RcppArmadillo, RhpcBLASctl, DiceKriging

If these packages are not yet installed, you install them using Rstudio by selecting: *Tools, Install Packages..., Install from Repository (CRAN...)*, and typing the name of the package to install. Or you can type in R successively

```
install.packages("Rcpp")
install.packages("RcppArmadillo")
install.packages("RhpcBLASctl")
install.packages("DiceKriging")
```

## 4. Download the file *nestedKriging\_x.x.x.tar.gz* on your computer

Download the file *nestedKriging\_x.x.x.tar.gz*: you can get it from <https://github.com/drulliere/nestedKriging> always use GitHub "download" button, never a right click download!

If you want, it is better to check the downloaded file integrity by comparing controls sums of the package with those indicated in the file *nestedKriging\_checksums.txt* (see e.g. <http://bit.ly/2lrqxt2>).

## 5. Install the tar.gz file

On RStudio, you can select: *Tools, Install Packages..., Install from Package Archive File*, and select the file *nestedKriging\_x.x.x.tar.gz* (replace x.x.x by the version number, take the latest version). Or you can type in R:

```
install.packages("yourAccessPath/nestedKriging_x.x.x.tar.gz", repos = NULL, type = "source")
```

You have to adapt the access path. It is not necessary to type this access path if the working repository contains the file *nestedKriging\_x.x.x.tar.gz*.

## 6. Check installation

The simplest way to run tests is to type in R:

```
library(nestedKriging)
tests_run()
```

you can also try a basic example by typing

```
example(nestedKriging)
```

you can also try some demos by typing one of these

```
demo(demoA)
demo(demoB)
demo(demoC)
demo(demoD)
demo(demoE)
```

see package help if you have questions on the functions of the package.