# Style Guide

### Ivan Jacob Agaloos Pesigan

Follow the Google R style guide (https://google.github.io/styleguide/Rguide.html) as much as possible. Note that the Google R style guide is a fork of the Tidyverse style guide (https://style.tidyverse.org/index.html) with some changes most notably with regard to function names. Thus, only flags that relate to function names are allowed when running lintr.

## 1 R Objects

• snake\_case for object names except for function names

## 2 R Functions

- use BigCamelCase for function names to distinguish functions from other objects
- append a dot (.) at the beginning for unexported functions (.Foo)
- append dot Check (.Check) at the beginning for unexported functions used for sanity checks (.CheckFoo)
- when calling functions from another package use the :: notation as much as possible (stats::rnorm(n = 10, mean = 100, sd = 15))
- when calling a function, use argument names as much as possible (stats::rnorm(n = 10, mean = 100, sd = 15))

## 3 File and Filenames

- filenames should be in lowercase using dash (-) as separator
- capitalize R if used as a file extension

#### 3.1 Files that Contain Functions

#### 3.1.1 Folders

- latex/r-scripts for functions used to process LATEX output
- R and r-dependencies for functions that are part of the package
- r-misc for useful functions but are not essential to the package
- r-writeup for functions that are used in write-ups such as manuscripts and presentations
- r-set-env and r-set-pkg for functions that are used to setup the environment install packages

#### 3.1.2 Files and Filenames

- use one file per function
- use the function name as part of the filename but convert BigCamelCase to lowercase using dash (-) as separator
- for files under R and r-dependencies
  - package name dash function name dot R (template-foo.R)
  - if the file contains an unexported function, follow the rules as usual but append the word dot at the end of the filename (template-foo-dot.R)
  - if the file contains an unexported sanity check function, follow the rules as usual but append the word check at the end of the filename (template-foo-check.R)

#### 3.2 Files Under Test Folders

#### 3.2.1 Folders

- tests/testthat for unit tests that are part of the package
- tests-benchmark for benchmark tests that are NOT part of the package unit tests
- tests-external for external tests that are NOT part of the package unit tests

#### 3.2.2 Files and Filenames

- use setup-test.R as an optional file for loading setup function or objects. Note that setup-test.R is sourced before the test\*.R files.
- use one file for tests for a single function
- use the function name as part of the filename but convert BigCamelCase to lowercase using dash (-) as separator
- for files under tests/testthat
  - test dash package name dash function name dot R (test-template-foo.R)
- for files under tests-benchmark
  - test dash benchmark dash package name dash function name dot R (test-benchmark-template-foo.R)
- for files under tests-external
  - test dash external dash package name dash function name dot R (test-external-template-foo.R)

## References

R Core Team. (2022). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/