

# docopt, add beautiful command line options to *R* scripts

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With its increasing popularity *R* scripts are more and more executed in batch mode from the command line. When a script matures and becomes more generic it often is desirable to add command-line options to it. Starting simple you may use `cmdArgs` to parse the extra options given to the script, but it quickly becomes complicated: parsing multiple options, long and short names for options, default values for options, generating sensible information when incorrect input is given and documenting all options for usage can take quite some code and time. The packages **getopt** [1] and **optparse** [4] can be of great help for parsing command-line arguments, but **docopt** makes it super easy.

The R-package **docopt** [2] is a port of the *Python* package `docopt`. Docopt is a command-line interface description language, and helps you to formulate a command-line interface and automatically generate a parser for it, that will parse the command-line arguments automatically for you. The nice part is that the documentation given to the user is equal to its definition.

As an appetizer: `docopt("Usage: prog [-a -b=value] ")` will generate a parser and test if `a` and `b` were set in the command line. It returns a list in which the values for `a` and `b` are included.

The presentation will introduce **docopt**, describe its usage, specification format and some of its implementation details.

## References

- [1] Allen Day, T. L. D. (2013). *getopt: C-like getopt behavior*. R package version 1.20.0.
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- [4] Trevor L Davis, S. L. and J. Nikelski. (2013). *optparse: Command line option parser*. R package version 1.0.2.
- [5] Van Rossum, G. et al. (2007). Python programming language. In *USENIX Annual Technical Conference*.