

# Package **CompSign**

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```
## knitr preferences
## no chache
```

```
## install latest version
library(devtools)
devtools::install_github("lm687/CompSign")

## Downloading GitHub repo lm687/CompSign@master
## from URL https://api.github.com/repos/lm687/CompSign/zipball/master
## Installing CompSign
## '/Library/Frameworks/R.framework/Resources/bin/R' --no-site-file
\
## --no-environ --no-save --no-restore --quiet CMD INSTALL \
## '/private/var/folders/22/nzk7280n61jd5qrjhm5cwph0000gn/T/Rtmpude4D0/devtoolsfc44523264
\
## --library='/Library/Frameworks/R.framework/Versions/3.4/Resources/library'
\
## --install-tests
##

library(CompSign)
```

```
#####
##### Dummy data #####
#####

### Example of matrix transformed into sign object
input_dummy <- matrix(runif(100), 4)
colnames(input_dummy) <- paste0('s', 1:25); rownames(input_dummy) <- paste0('sam', 1:4)
sign_dummy <- to_sign(input_dummy)
```

# 1 Summarise the signature matrix

```
add_together_matrix(sign_dummy)

## An object of class "sign"
## Slot "id":
## [1] "input_dummy"
##
## Slot "id_samples":
## [1] "sam1" "sam2" "sam3" "sam4"
##
## Slot "id_signatures":
## [1] "s1" "s2" "s3" "s4" "s5" "s6" "s7" "s8" "s9" "s10" "s11"
## [12] "s12" "s13" "s14" "s15" "s16" "s17" "s18" "s19" "s20" "s21" "s22"
## [23] "s23" "s24" "s25"
##
## Slot "count_matrix":
##           s1           s2           s3           s4           s5           s6
## sam1 0.57565830 0.43841183 0.4008968 0.3076494 0.3229086 0.7499751
## sam2 0.19714433 0.58468167 0.2681107 0.2013544 0.8086603 0.8574493
## sam3 0.04012587 0.20440907 0.7500883 0.4753724 0.5023724 0.9230279
## sam4 0.29369066 0.01188221 0.7564156 0.1531327 0.0826434 0.8665005
##           s7           s8           s9           s10          s11          s12          s13
## sam1 0.9078592 0.6734733 0.8567646 0.8545546 0.7283661 0.9760212 0.9929017
## sam2 0.2538150 0.5642225 0.7433936 0.3209805 0.2527283 0.6632294 0.6069549
## sam3 0.5312044 0.9311652 0.9700212 0.7434652 0.4290070 0.4713822 0.3061882
## sam4 0.0110569 0.1930629 0.3448909 0.5225740 0.8325209 0.6467054 0.5844162
##           s14          s15          s16          s17          s18          s19
## sam1 0.3600841 0.4396899 0.7245471 0.9165410 0.15895290 0.2450278
## sam2 0.6609636 0.2523587 0.4004014 0.8189681 0.58187297 0.2803102
## sam3 0.3070374 0.3151407 0.2964818 0.2791626 0.64876625 0.4825279
## sam4 0.5716370 0.2868293 0.4452123 0.2865703 0.03295695 0.5651676
##           s20          s21          s22          s23          s24          s25
## sam1 0.80130799 0.5250635 0.02655553 0.4815083 0.43074812 0.36418650
## sam2 0.07725346 0.7186432 0.08732918 0.9140912 0.36130165 0.03541891
## sam3 0.64145169 0.8174649 0.84424209 0.7476501 0.00975025 0.38198717
## sam4 0.44501709 0.9719827 0.22280426 0.2310962 0.49727901 0.72284429
##
## Slot "modified":
## [1] TRUE

summarise(add_together_matrix(sign_dummy))

## NULL
```