## 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
\textit{\#\# 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/nzk7280n61jd5qrjhqm5cwph0000gn/T/RtmpaRfI49/devtools126035f4df
   --library='/Library/Frameworks/R.framework/Versions/3.4/Resources/library'
##
   --install-tests
##
library(CompSign)
###### Dummy data ######
############################
```

colnames(input\_dummy) <- paste0('s', 1:25); rownames(input\_dummy) <- paste0('sam', 1:4)</pre>

### Example of matrix transformed into sign object

input\_dummy <- matrix(runif(100), 4)</pre>

sign\_dummy <- to\_sign(input\_dummy)</pre>

## 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
## sam1 0.69062282 0.9672219 0.62562710 0.4690275 0.3792405 0.3305052
## sam2 0.86800022 0.5374467 0.76568801 0.4322634 0.2753126 0.8415556
## sam3 0.64362621 0.9752237 0.00378284 0.7490750 0.3070121 0.5930544
## sam4 0.04847638 0.3489585 0.62147883 0.6541067 0.7884039 0.1149209
                                   s9
                                            s10
##
                        s8
              s7
                                                     s11
## sam1 0.2476189 0.2671283 0.9350574 0.1607936 0.9829997 0.74849315
## sam2 0.9642939 0.1429171 0.8887744 0.5944088 0.3479853 0.01735148
## sam3 0.6558196 0.7022031 0.7404642 0.9200056 0.1216139 0.10969063
## sam4 0.3796913 0.9544759 0.0389055 0.1701060 0.1088946 0.79154432
##
              s13
                       s14
                                  s15
                                             s16
                                                       s17
## sam1 0.2468711 0.2528405 0.1091815 0.47610287 0.4663671 0.568263970
## sam2 0.7659235 0.4322539 0.4948362 0.01784807 0.4699570 0.686851704
## sam3 0.5319617 0.7745123 0.9250779 0.75015802 0.6404996 0.967007244
## sam4 0.2284532 0.5147217 0.0573016 0.68066105 0.9029872 0.006497333
##
               s19
                        s20
                                   s21
                                             s22
                                                       s23
## sam1 0.02072342 0.5540116 0.1666626 0.9759731 0.9222873 0.9100258
## sam2 0.26439342 0.8918922 0.0970714 0.5567672 0.3699065 0.1574611
## sam3 0.70919774 0.4136969 0.1278325 0.5543108 0.2466200 0.5141574
## sam4 0.72029902 0.7122125 0.4794626 0.4493202 0.1392915 0.6068766
##
## sam1 0.2875972
## sam2 0.0735830
## sam3 0.3036598
## sam4 0.2160250
## Slot "modified":
## [1] TRUE
```

```
summarise(add_together_matrix(sign_dummy))
## NULL
```