Package: finemapr (via r-universe)

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Title R wrapper to fine-mappers

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Description R wrapper to fine-mappers.

License GPL (>= 3)

URL https://github.com/variani/finemapr

Imports tibble, dplyr, readr, magrittr, ggplot2, ggrepel, cowplot, data.table, Matrix

Suggests proxysnps, RCurl, gaston, rsnps, testthat, knitr, rmarkdown

Collate 'package.R' 'names.R' 'sumstats.R' 'abf.R' 'cojo.R' 'utils.R' 'read.R' 'datasets.R' 'files.R' 'plots.R' 'finemap.R' 'caviar.R' 'paintor.R' 'classMethods.R' 'classFinemaprPaintor.R' 'classFinemaprFinemap.R' 'classFinemaprCaviar.R' 'finemapr.R' 'ld.R' 'zzz.R'

RoxygenNote 7.1.1

VignetteBuilder knitr

Repository https://mrcieu.r-universe.dev

RemoteUrl https://github.com/remlapmot/finemapr

RemoteRef suggestions

RemoteSha d99c5ac89d37f06027b783395b45fddfdc6d4aa7

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`cojo` *Run GCTA-COJO.*

Description

http://gcta.freeforums.net/thread/178/conditional-joint-analysis-using-summary

Usage

```
cojo(
  tab,
  bed,
  method = c("select", "cond"),
  cmd = "",
  snps_cond = NULL,
  dir_run = "run_cojo",
  tool = getOption("finemapr_cojo"),
  args = ""
)
```

Details

tab <- "~/git/hemostat/scc/results/sumstats-cojo/sumstats-1.cojo" bed <- "~/git/hemostat/scc/data/FineMapping/forGCTA_on

---

`filename_zscore.FinemaprFinemap`
S3 class FinemaprFinemap.

Description

S3 class FinemaprFinemap.

Usage

```
## S3 method for class 'FinemaprFinemap'
filename_zscore(x, locus = 1)

## S3 method for class 'FinemaprFinemap'
filename_ld(x, locus = 1)

## S3 method for class 'FinemaprFinemap'
filename_snp(x, locus)

## S3 method for class 'FinemaprFinemap'
filename_config(x, locus)

## S3 method for class 'FinemaprFinemap'
filename_k(x, locus)

## S3 method for class 'FinemaprFinemap'
filename_log(x, locus)

## S3 method for class 'FinemaprFinemap'
filename_master(x)

## S3 method for class 'FinemaprFinemap'
write_files(x, ...)

## S3 method for class 'FinemaprFinemap'
run_tool(x, ...)

## S3 method for class 'FinemaprFinemap'
collect_results(x, ...)

print.FinemaprFinemap(x, ...)

## S3 method for class 'FinemaprFinemap'
plot(
  x,
  grid_nrow = NULL,
  grid_ncol = NULL,
  label_size = getOption("finemapr_label_size"),
  label_size_config = label_size,
  label_size_snp = label_size,
  top_rank = getOption("top_rank"),
  top_rank_config = top_rank,
  top_rank_snp = top_rank,
  lim_prob = getOption("lim_prob"),
  lim_prob_config = lim_prob,
  lim_prob_snp = lim_prob,
  lim_prob_ncausal = lim_prob,
```

```
  ...
)

## S3 method for class 'FinemaprFinemap'
plot_ncausal(x, locus = 1, lim_prob = c(0, 1), ...)

## S3 method for class 'FinemaprFinemap'
plot_config(
  x,
  locus = 1,
  lim_prob = c(0, 1.5),
  label_size = getOption("finemapr_label_size"),
  top_rank = getOption("top_rank"),
  ...
)

## S3 method for class 'FinemaprFinemap'
plot_snp(
  x,
  locus = 1,
  lim_prob = c(0, 1.5),
  label_size = getOption("finemapr_label_size"),
  top_rank = getOption("top_rank"),
  ...
)
```

`filename_zscore.FinemaprPaintor` *S3 class FinemaprPaintor.*

Description

S3 class FinemaprPaintor.

Usage

```
## S3 method for class 'FinemaprPaintor'
filename_zscore(x, locus = 1)

## S3 method for class 'FinemaprPaintor'
filename_ld(x, locus = 1)

## S3 method for class 'FinemaprPaintor'
filename_annot(x, locus = 1)

## S3 method for class 'FinemaprPaintor'
filename_master(x)
```

```
## S3 method for class 'FinemaprPaintor'
filename_snp(x, locus)

print.FinemaprPaintor(x, ...)

## S3 method for class 'FinemaprPaintor'
process_annot(x, annots, annotations, ...)

## S3 method for class 'FinemaprPaintor'
write_files(x, ...)

## S3 method for class 'FinemaprPaintor'
run_tool(x, ...)

## S3 method for class 'FinemaprPaintor'
collect_results(x, ...)
```

`finemapr` *Run FINEMAP.*

Description

Run FINEMAP.

Usage

```
finemapr(
  tab,
  ld,
  n,
  annot,
  annotations,
  prop_credible = 0.95,
  method = c("finemap", "paintor"),
  dir_run,
  tool,
  args = "",
  prior_k,
  save_ld = FALSE,
  ret = c("results", "zscore", "ld")
)
```

Examples

```
ex <- example_finemap()
out <- finemapr(list(ex$tab1, ex$tab2), list(ex$ld1, ex$ld2), list(ex$n1, ex$n2), args = "--n-causal-max 1")
out <- finemapr(list(ex$tab1, ex$tab2), list(ex$ld1, ex$ld2), list(ex$n1, ex$n2), method = "paintor", args = "-enum
```

`FinemaprCaviar` *S3 class FinemaprCaviar.*

Description

S3 class FinemaprCaviar.

Usage

```
print.FinemaprCaviar(x, ...)

## S3 method for class 'FinemaprCaviar'
plot(x, ...)

## S3 method for class 'FinemaprCaviar'
plot_snp(
  x,
  lim_prob = c(0, 1.5),
  label_size = getOption("finemapr_label_size"),
  top_rank = getOption("top_rank"),
  ...
)
```

`finemaprPackage` *Package finemapr.*

Description

R wrapper to fine-mappers.

`plot_zscore.Finemapr` *S3 class Finemapr.*

Description

S3 class Finemapr.

Usage

```
## S3 method for class 'Finemapr'
plot_zscore(
  x,
  locus = 1,
  label_size = getOption("finemapr_label_size"),
  selected,
  force = 20,
  color_main = "grey75",
  color_selected = "aquamarine4",
  color_credible = "dodgerblue4",
  color_missing = "brown",
  plot_missing = FALSE,
  ...
)

plot_ncausal(x, ...)

print.Finemapr(x, ...)

print.Finemapr(x, ...)

## S3 method for class 'Finemapr'
plot(x, ...)

## S3 method for class 'Finemapr'
plot_snp(
  x,
  lim_prob = c(0, 1.5),
  label_size = getOption("finemapr_label_size"),
  top_rank = getOption("top_rank"),
  ...
)

## S3 method for class 'Finemapr'
extract_credible_set(x, ...)

## S3 method for class 'Finemapr'
process_tab(x, tabs, ...)

## S3 method for class 'Finemapr'
process_ld(x, lds, ...)
```

Note

Colors: http://www.stat.columbia.edu/~tzheng/files/Rcolor.pdf

proxysnps_ref_ld *https://github.com/slowkow/proxysnps/blob/master/R/get_vcf.R*

Description

https://github.com/slowkow/proxysnps/blob/master/R/get_vcf.R

Usage

```
proxysnps_ref_ld(
  vcf,
  tol = 1e-10,
  measure = c("R.squared", "D.prime"),
  verbose = 0
)
```

proxysnps_ref_vcf *https://github.com/slowkow/proxysnps/blob/master/R/get_vcf.R*

Description

https://github.com/slowkow/proxysnps/blob/master/R/get_vcf.R

Usage

```
proxysnps_ref_vcf(
  chr = 16,
  start = 53767000,
  end = 53768000,
  pop = "EUR",
  snps = NULL,
  verbose = 0
)
```

read_ld *Read LD matrix from a file.*

Description

Read LD matrix from a file.

Usage

```
read_ld(file_ld, snps)
```

Examples

```
f1 <- system.file("extdata/region1.ld", package = "finemapr")
ld <- read_ld(f1)
```

read_zscore *Read z-scores from a file.*

Description

Read z-scores from a file.

Usage

```
read_zscore(file_zscore)
```

Examples

```
f1 <- system.file("extdata/region1.z", package = "finemapr")
ztab <- read_zscore(f1)
```

run_caviar *Run CAVIAR.*

Description

Output file (‘*_post‘): column #1 is the variant name; column #2 is the posterior prob. that the variant is causal (https://github.com/fhormoz/caviar/issues/1#issuecomment-286521771); column #3 is the amount that this variant contributes to 95

Usage

```
run_caviar(
  tab,
  ld,
  dir_run = "run_caviar",
  tool = getOption("finemapr_caviar"),
  args = ""
)
```

Examples

```
ex <- example_finemap()
out <- run_caviar(ex$tab1, ex$ld1, args = "-c 2")
out <- run_caviar(ex$tab1, ex$ld1, args = "-c 0")
```

run_finemap *Run FINEMAP.*

Description

Run FINEMAP.

Usage

```
run_finemap(
  tab,
  ld,
  n,
  dir_run = "run_finemap",
  tool = getOption("finemapr_finemap"),
  args = ""
)
```

Examples

```
ex <- example_finemap()
out <- run_finemap(ex$tab1, ex$ld1, ex$n1, args = "--n-causal-max 3")
out <- run_finemap(ex$tab1, ex$ld1, ex$n1, args = "--n-causal-max 1")
```

`run_paintor` *Run Paintor.*

Description

Run Paintor.

Usage

```
run_paintor(
  tab,
  ld,
  n,
  annot,
  annotations,
  dir_run = "run_paintor",
  tool = getOption("finemapr_paintor"),
  args = ""
)
```

Examples

```
ex <- example_finemap()
out <- run_paintor(ex$tab1, ex$ld1)
```

`sumstats_bmi` *https://data.broadinstitute.org/alkesgroup/sumstats_formatted/readme.txt https://github.com/bulik/ldsc/wiki/Partitioned-Heritability*

Description

https://data.broadinstitute.org/alkesgroup/sumstats_formatted/readme.txt https://github.com/bulik/ldsc/wiki/Partitioned-Heritability

Usage

```
sumstats_bmi()
```

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