Package: rbcor (via r-universe)

October 11, 2026

Type Package

Title Read BCOR Files into R

Version 1.0.0

Description Reads binary correlation (BCOR) files generated by LDStore into R's sparse matrix format. BCOR files store linkage disequilibrium correlation matrices in a compressed binary format.

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Encoding UTF-8

LazyData true

Imports Rcpp (>= 1.0.14), Matrix

LinkingTo Rcpp, RcppArmadillo

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

RoxygenNote 7.3.2

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

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print.bcor *Print bcor Object*

Description

Print bcor Object

Usage

```
## S3 method for class 'bcor'
print(x, ...)
```

Arguments

x	A bcor object
...	Additional arguments (ignored)

read_bcor *Read BCOR File*

Description

Opens a BCOR (binary correlation) file and returns a bcor object. Supports both standard BCOR format (magic: "bcor1.1") and extended format (magic: "bcor1.x") which stores diagonal values explicitly.

Usage

```
read_bcor(filename, read_header = TRUE, packed_threshold = 1000)
```

Arguments

filename	Path to the BCOR file
read_header	Whether to read the header and metadata immediately (default: TRUE)
packed_threshold	Size threshold for using packed symmetric matrices (default: 1000)

Value

A bcor object containing:

- ptr: External pointer to the C++ bcor object
- filename: Path to the BCOR file
- nSNPs: Number of SNPs in the file
- nSamples: Number of samples used to compute correlations
- is_extended: Whether the file uses extended format with diagonal values

Examples

```
## Not run:
bcor <- read_bcor("path/to/file.bcor")

# Access metadata
meta <- bcor$get_meta()

# Read full correlation matrix
corr_full <- bcor$read_corr()

# Read subset of correlations
corr_subset <- bcor$read_corr(snps = c(1, 10, 20))

# Read rectangular submatrix
corr_rect <- bcor$read_corr(snps = 1:10, snps2 = 11:20)

# Read sparse matrix with threshold
corr_sparse <- bcor$read_corr(snps = 1:100, sparse = TRUE, threshold = 0.1)

# Read packed symmetric matrix (memory efficient for large matrices)
corr_packed <- bcor$read_corr(packed = TRUE)

# Get diagonal values (useful for extended format files)
diag_vals <- bcor$get_diagonal()

## End(Not run)
```

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