

ANALYSIS^{WITH}PROGRAMMING

cout << "let's do some analysis and programming" << endl;

<http://alstatr.blogspot.com/>

BASIC MATHEMATICAL FUNCTIONS *R Programming*

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R can perform the usual mathematical operations, below are the functions:

Arithmetic

- + - addition
- - - subtraction
- * - multiplication
- / - division

Trigonometry

- sin - sine
- cos - cosine
- tan - tangent
- asin - sine inverse
- acos - cosine inverse
- atan - tangent inverse

Linear Algebra

- + - element-wise addition
- - - element-wise subtraction
- * - element-wise multiplication
- / - element-wise division
- %*% - matrix multiplication
- t - transpose
- eigen - eigenvalues and eigenvectors
- solve - inverse of matrix
- ginv - generalized inverse, requires MASS package

- `rbind` - combines vectors of observations horizontally into matrix class
- `cbind` - combines vectors of observations vertically into matrix class

References

Kabacoff, R. I. *Matrix Algebra*. Quick-R. Retrieved April 20, 2013.

Trigonometric Functions. *R Documentation*. R.2.15.1

Labels

Mathematics, R,