

Changes on CRAN

2015-06-01 to 2015-11-30

by Kurt Hornik and Achim Zeileis

New packages in CRAN task views

Bayesian [eco](#), [rstan](#).

ChemPhys [compositions](#).

ClinicalTrials [samplesize](#).

Cluster [BayesLCA](#), [NbClust](#), [dbscan](#), [longclust](#).

Distributions [BivarP](#), [CompGLM](#), [Compounding](#), [DiscreteLaplace](#), [DiscreteWeibull](#), [EMMIXskew](#), [ExtDist](#), [FMStable](#), [GIGrv](#), [GenBinomApps](#), [GenOrd](#), [HAC](#), [JohnsonDistribution](#), [LIHNPSD](#), [MM](#), [MitISEM](#), [MixedTS](#), [NormalLaplace](#), [ORDER2PARENT](#), [OrdNor](#), [PerMallows](#), [SCI](#), [TTmoment](#), [csn](#), [degreenet](#), [dirmult](#), [disclap](#), [emg](#), [fpow](#), [frmqa](#), [gambin](#), [gb](#), [gldist](#), [kolmim](#), [logitnorm](#), [minimax](#), [mnormpow](#), [mvprpb](#), [nCDunnett](#), [polyaAeppli](#), [powerLaw](#), [qmap](#), [rtdists](#), [sfsmisc](#), [skellam](#), [symmoments](#), [vines](#).

Econometrics [gets](#), [midasr](#), [sfa](#), [spfrontier](#), [ssfa](#).

Environmetrics [eco](#), [mra](#).

ExperimentalDesign [ALTopt](#), [Crossover](#), [EngrExpt](#), [LDOD](#), [MAMS](#), [MaxPro](#), [OPDOE](#), [OptGS](#), [OptInterim](#), [PopED](#), [VdgRsm](#), [agridat](#), [bcrm](#), [blockTools](#), [blocksdesign](#), [daewr](#), [designGG](#), [geospt](#), [oapackage](#), [pipe.design](#), [rodd](#), [simrel](#), [sp23design](#), [tox-testD](#).

Finance [FatTailsR](#), [PortRisk](#), [Rblpapi](#), [covmat](#), [credule](#).

HighPerformanceComputing [flowr](#), [future](#), [partDSA](#), [toaster](#).

MachineLearning [FCNN4R](#), [Rborist](#), [ranger](#).

MetaAnalysis [MetaPath](#), [RcmdrPlugin.RMTCJags](#), [etma](#), [joint.Cox](#), [meta4diag](#), [metaSEM](#), [metagear](#), [xmeta](#).

Multivariate [cwhmisc](#), [delt](#), [knncat](#).

NaturalLanguageProcessing [stringi](#), [textreuse](#).

NumericalMathematics [Pade](#), [lamW](#), [mvQuad](#).

OfficialStatistics [hot.deck](#), [mipfp](#).

Optimization [ECOSolveR](#), [NlcOptim](#), [Rdsdp](#), [bvls](#), [copulaedas](#), [kofnGA](#), [lbfgsb3](#), [matchingR](#), [nls2](#), [nnls](#), [onls](#), [qap](#), [tabuSearch](#).

Phylogenetics [SigTree](#), [markophylo](#), [pmc](#).

Psychometrics [OpenMx](#), [pwrRasch](#).

ReproducibleResearch [papeR](#).

SocialSciences [Amelia](#), [MCMCglmm*](#), [PAFit](#), [PSAgraphics](#), [RSiena](#), [VGAM*](#), [VIM](#), [arm](#), [betareg](#), [biglm](#), [catspec](#), [demography](#), [dispmod](#), [elrm](#), [ergm](#), [influence.ME](#), [logistf](#), [logmult](#), [lsmeans*](#), [mi*](#), [mlogit](#), [multgee](#), [multiplex](#), [nlstools](#), [norm](#), [np](#), [simpleboot](#), [statnet](#), [visreg](#).

Spatial [OasisR](#), [rgrass7](#), [spBayesSurv](#), [spatsurv](#), [tmap](#).

SpatioTemporal [STMedianPolish](#), [ctmcmmove](#), [ctmm](#), [moveHMM](#), [rsatscan](#).

Survival [dynpred](#), [glrt](#), [parfm](#), [survJamda](#).

TimeSeries [EMD](#), [LSTS](#), [PCA4TS](#), [Rlibeemd](#), [TSMining](#), [Wats](#), [ZIM](#), [autovarCore](#), [bent-cableAR](#), [changepoint](#), [dtwclust](#), [ecp](#), [fanplot](#), [hht](#), [imputeTS](#), [jmotif](#), [mlVAR](#), [spectral.methods](#), [tseriesEntropy](#), [wbsts](#).

WebTechnologies [RSocrata](#), [bigml](#), [googlePublicData](#), [htmltab](#), [pxweb](#), [rsnps](#).

gR [BDgraph](#), [FBFsearch](#), [huge](#), [ndtv](#), [networkDynamic](#).

(* = core package)

New contributed packages

ACDm Tools for Autoregressive Conditional Duration Models. Author: Markus Belfrage.

ACSNMineR Gene Enrichment Analysis from ACSN Maps or Gmt Files. Authors: Paul Deveau [aut, cre], Eric Bonnet [aut].

ACSWR A Companion Package for the Book “A Course in Statistics with R”. Author: Prabhanjan Tattar.

AF Model-Based Estimation of Confounder-Adjusted Attributable Fractions. Authors: Elisabeth Dahlqvist and Arvid Sjolander.

AFM Atomic Force Microscope Image Analysis. Authors: Mathieu Beauvais [aut, cre], Irma Liascukienė [aut], Jessem Landoulsi [aut].

AHR Estimation and Testing of Average Hazard Ratios. Author: Matthias Brueckner.

ANOM Analysis of Means. Author: Philip Pallmann.

APSIM General Utility Functions for the ‘Agricultural Production Systems Simulator’. Author: Justin Fainges.

ART Aligned Rank Transform for Nonparametric Factorial Analysis. Author: Pablo J. Villacorta.

AdaptGauss Gaussian Mixture Models (GMM). Authors: Michael Thrun, Onno Hansen-Goos, Rabea Griese, Catharina Lippmann, Jorn Lotsch, Alfred Ultsch.

AggregateR Aggregate Numeric, Date and Categorical Variables by an ID. Authors: Matthias Bogaert, Michel Ballings, Dirk Van den Poel.

AlgebraicHaploPackage Haplotype Two Snips Out of a Paired Group of Patients. Author: Jan Wolfertz.

ArgumentCheck Improved Communication to Users with Respect to Problems in Function Arguments. Author: Benjamin Nutter.

AssocTests Genetic Association Studies. Authors: Lin Wang [aut], Wei Zhang [aut], Qizhai Li [aut], Weicheng Zhu [ctb].

AutoModel Automated Hierarchical Multiple Regression with Assumptions Checking. Author: Alex Lishinski.

AutoregressionMDE Minimum Distance Estimation in Autoregressive Model. Author: Jiwoong Kim.

- AzureML** Discover, Publish and Consume Web Services on Microsoft Azure Machine Learning. Authors: Raymond Laghaeian [aut, cre], Brianna Gerads [aut], Ritika Ravichandra [aut], Alex Wang [aut].
- BCEE** The Bayesian Causal Effect Estimation Algorithm. Authors: Denis Talbot, Geneviève Lefebvre, Juli Atherton.
- BEDMatrix** Matrices Backed by Binary PED Files (PLINK). Authors: Alexander Grueneberg [aut, cre], Lian Lian [ctb], Gustavo de los Campos [ctb].
- BIGDAWG** Case-Control Analysis of Multi-Allelic Loci. Authors: Derek Pappas, Steve Mack, Jill Hollenbach.
- BTLasso** Modelling Heterogeneity in Paired Comparison Data. Author: Gunther Schauburger.
- Bagidis** BAses Gliving DIStances. Author: Catherine Timmermans.
- BayesBD** Bayesian Boundary Detection in Images. Author: Meng Li.
- BayesMAMS** Designing Bayesian Multi-Arm Multi-Stage Studies. Authors: Philip Pallmann, Amanda Turner.
- BiTrinA** Binarization and Trinarization of One-Dimensional Data. Authors: Stefan Mundus, Christoph Müssel, Florian Schmid, Ludwig Lausser, Tamara J. Blätte, Martin Hopfensitz, Hans A. Kestler.
- Biocomb** Feature Selection and Classification with the Embedded Validation Procedures for Biomedical Data Analysis. Authors: Natalia Novoselova, Junxi Wang, Frank Pessler, Frank Klawonn.
- Blossom** Statistical Comparisons with Distance-Function Based Permutation Tests. Authors: Marian Talbert, Jon Richards, Paul Mielke, and Brian Cade.
- CALF** Coarse Approximation Linear Function. Authors: Stephanie Lane [aut, cre], Clark Jeffries [aut], Diana Perkins [aut].
- CANSIM2R** Directly Extracts Complete CANSIM Data Tables. Author: Marco Lugo.
- COMBIA** Synergy/Antagonism Analyses of Drug Combinations. Author: Muhammad Kashif.
- CTTShiny** Classical Test Theory via Shiny. Authors: William Kyle Hamilton [aut, cre], Atsushi Mizumoto [aut].
- CUB** A Class of Mixture Models for Ordinal Data. Authors: Maria Iannario, Domenico Piccolo.
- CUSUMdesign** Compute Decision Interval and Average Run Length for CUSUM Charts. Authors: Douglas M. Hawkins, David H. Olwell, Boxiang Wang.
- Canopy** Accessing Intra-Tumor Heterogeneity and Tracking Longitudinal and Spatial Clonal Evolutionary History by Next-Generation Sequencing. Authors: Yuchao Jiang, Nancy R. Zhang.
- CensMixReg** Censored Linear Mixture Regression Models. Authors: Luis Benites Sanchez, Victor Hugo Lachos.
- ChannelAttribution** Markov Model for the Online Multi-Channel Attribution Problem. Author: Davide Altomare.
- CircOutlier** Detecting of Outliers in Circular Regression. Authors: Azade Ghazanfarihesari, Majid Sarmad.

- ClamR** Time Series Modeling for Climate Change Proxies. Author: Jonathan M. Lees.
- ClustGeo** Clustering of Observations with Geographical Constraints. Authors: Amaury Labenne, Marie Chavent, Vanessa Kuentz-Simonet and Jerome Saracco.
- ClusterStability** Assessment of Stability of Individual Objects or Clusters in Partitioning Solutions. Authors: Etienne Lord, Francois-Joseph Lapointe, and Vladimir Makarencov.
- Combine** Game-Theoretic Probability Combination. Authors: Alaa Ali, Marta Padilla and David R. Bickel.
- CommT** Comparative Phylogeographic Analysis using the Community Tree Framework. Author: Michael Gruenstaedl.
- CompR** Paired Comparison Data Analysis. Author: Michel Semenou.
- CompareCausalNetworks** Interface to Diverse Estimation Methods of Causal Networks. Authors: Christina Heinze, Nicolai Meinshausen.
- ComplexAnalysis** Numerically Evaluate Integrals and Derivatives (also Higher Order) of Vector- And Complex-Valued Functions. Author: Char Leung.
- ConsRank** Compute the Median Ranking(s) According to the Kemeny's Axiomatic Approach. Authors: Antonio D'Ambrosio, Sonia Amodio.
- CopyNumber450kCancer** Baseline Correction for Copy Number Data from Cancer Samples. Author: Nour-al-dain Marzouka [aut, cre].
- CoxPlus** Cox Regression (Proportional Hazards Model) with Multiple Causes and Mixed Effects. Author: Jing Peng.
- CryptRndTest** Statistical Tests for Cryptographic Randomness. Author: Haydar Demirhan.
- D3M** Two Sample Test with Wasserstein Metric. Author: Yusuke Matsui & Teppei Shimamura.
- DCchoice** Analyzing Dichotomous Choice Contingent Valuation Data. Authors: Tomoaki Nakatani [aut, cph] (original developer), Hideo Aizaki [aut, cre] (code patches), Kazuo Sato [ctb] (theoretical part of the manual).
- DIFboost** Detection of Differential Item Functioning (DIF) in Rasch Models by Boosting Techniques. Author: Gunther Schauberg.
- DJL** Distance Measure Based Judgment and Learning. Author: Dong-Joon Lim.
- DRIP** Discontinuous Regression and Image Processing. Author: Yicheng Kang.
- DT** A Wrapper of the JavaScript Library 'DataTables'. Authors: Yihui Xie [aut, cre], Joe Cheng [ctb], jQuery contributors [ctb, cph] (jQuery in htmlwidgets/lib), SpryMedia Limited [ctb, cph] (DataTables in htmlwidgets/lib), Brian Reavis [ctb, cph] (selectize.js in htmlwidgets/lib), Leon Gersen [ctb, cph] (noUiSlider in htmlwidgets/lib), Bartek Szopka [ctb, cph] (jquery.highlight.js in htmlwidgets/lib), RStudio Inc [cph]. In view: *ReproducibleResearch*.
- DTRlearn** Learning Algorithms for Dynamic Treatment Regimes. Authors: Ying Liu, Yuanjia Wang, Donglin Zeng.
- DYM** Did You Mean? Author: Kosei Abe.
- DataLoader** Import Multiple File Types. Authors: Srivenkatesh Gandhi, Kreshnaa Raam S Bethusamy.
- DiffusionRgqd** Inference and Analysis for Generalized Quadratic Diffusions. Authors: Etienne A.D. Pienaar [aut, cre], Melvin M. Varughese [ctb].

- Directional** Directional Statistics. Authors: Michail Tsagris, Giorgos Athineou.
- DynTxRegime** Methods for Estimating Dynamic Treatment Regimes. Authors: S. T. Holloway, E. B. Laber, K. A. Linn, B. Zhang, M. Davidian, and A. A. Tsiatis.
- ECOSolveR** Embedded Conic Solver in R. Authors: Anqi Fu [aut], Balasubramanian Narasimhan [aut, cre]. In view: *Optimization*.
- EDFIR** Estimating Discrimination Factors. Authors: Alex Bond and Robert Robere.
- EEM** Read and Preprocess Fluorescence Excitation-Emission Matrix (EEM) Data. Author: Vipavee Trivittayasil.
- EGRETCi** Exploration and Graphics for RivEr Trends (EGRET) Confidence Intervals. Authors: Robert Hirsch [aut], Laura DeCicco [aut, cre].
- ELMR** Extreme Machine Learning (ELM). Author: Alessio Petrozziello [aut, cre].
- EMbC** Expectation-Maximization Binary Clustering. Authors: Joan Garriga, John R.B. Palmer, Aitana Oltra, Frederic Bartumeus.
- EPGLM** Gaussian Approximation of Bayesian Binary Regression Models. Author: James Ridgway.
- ESKNN** Ensemble of Subset of K-Nearest Neighbours Classifiers for Classification and Class Membership Probability Estimation. Authors: Asma Gul, Aris Perperoglou, Zardad Khan, Osama Mahmoud, Werner Adler, Miftahuddin Miftahuddin, and Berthold Lausen.
- EditImputeCont** Simultaneous Edit-Imputation for Continuous Microdata. Authors: Quanli Wang, Hang J. Kim, Jerome P. Reiter, Lawrence H. Cox and Alan F. Karr.
- EloChoice** Preference Rating for Visual Stimuli Based on Elo Ratings. Author: Christof Neumann.
- EpiBayes** Implements Hierarchical Bayesian Models for Epidemiological Applications. Authors: Matthew Branan, Marta Remmenga, Lori Gustafson, Jennifer Hoeting.
- EstHer** Estimation of Heritability in High Dimensional Sparse Linear Mixed Models using Variable Selection. Authors: Anna Bonnet and Celine Levy-Leduc.
- EurosarcBayes** Bayesian Single Arm Sample Size Calculation Software. Author: Peter Dutton.
- ExplainPrediction** Explanation of Predictions for Classification and Regression Models. Author: Marko Robnik-Sikonja.
- FACTMLE** Maximum Likelihood Factor Analysis. Authors: Koulik Khamaru, Rahul Mazumder.
- FCGR** Fatigue Crack Growth in Reliability. Authors: Antonio Meneses, Salvador Naya, Javier Tarrio-Saavedra, Ignacio Lopez-Ullibarri.
- FCNN4R** Fast Compressed Neural Networks for R. Author: Grzegorz Klima. In view: *MachineLearning*.
- FENmlm** Fixed Effects Nonlinear Maximum Likelihood Models. Author: Laurent Berge.
- FIACH** Retrospective Noise Control for fMRI. Author: Tim Tierney.
- FSA** Functions for Simple Fisheries Stock Assessment Methods. Author: Derek Ogle [aut, cre].
- FSAdata** Data to Support Fish Stock Assessment (FSA) Package. Author: Derek Ogle [aut, cre].

- FastBandChol** Fast Estimation of a Covariance Matrix by Banding the Cholesky Factor. Author: Aaron Molstad.
- FastGP** Efficiently Using Gaussian Processes with Rcpp and RcppEigen. Authors: Giri Gopalan, Luke Bornn.
- FastKM** A Fast Multiple-Kernel Method Based on a Low-Rank Approximation. Authors: Rachel Marceau, Wenbin Lu, Michele M. Sale, Bradford B. Worrall, Stephen R. Williams, Fang-Chi Hsu, Jung-Ying Tzeng, and Shannon T. Holloway.
- Fgmutils** Forest Growth Model Utilities. Authors: Clayton Vieira Fraga, Ana Paula Simiqueli, Wagner Amorim da Silva Altoe.
- ForecastCombinations** Forecast Combinations. Author: Eran Raviv. In view: *TimeSeries*.
- FractalParameterEstimation** Estimation of Parameters p and q for Randomized Sierpinski Carpet for $[p-p-p-q]$ -Model. Author: Philipp Hermann.
- Fragman** Fragment Analysis in R. Authors: Giovanni Covarrubias-Pazaran, Luis Diaz-Garcia, Brandon Schlautman, Walter Salazar, Juan Zalapa.
- FuzzyLP** Fuzzy Linear Programming. Authors: Carlos A. Rabelo [aut, cre], Pablo J. Villacorta [ctb].
- GERGM** Estimation and Fit Diagnostics for Generalized Exponential Random Graph Models. Authors: Matthew J. Denny, James D. Wilson, Skyler Cranmer, Bruce A. Desmarais, Shankar Bhamidi.
- GFD** Tests for General Factorial Designs. Authors: Sarah Friedrich, Frank Konietzschke, Markus Pauly.
- GSSE** Genotype-Specific Survival Estimation. Authors: Baosheng Liang, Yuanjia Wang and Donglin Zeng.
- GenCAT** Genetic Class Association Testing (GenCAT). Authors: Eric Reed, Sara Nuñez, Jing Qian, Andrea Foulkes.
- GeneralOaxaca** Blinder-Oaxaca Decomposition for Generalized Linear Model. Authors: Aurelien Nicosia and Simon Baillargeon-Ladouceur.
- GeoBoxplot** Geographic Box Plot. Author: Ao Li.
- GiANT** Gene Set Uncertainty in Enrichment Analysis. Authors: Florian Schmid, Christoph Müssel, Johann M. Kraus, Hans A. Kestler.
- Goslate** Goslate Interface. Authors: Author: Florian Schwendinger [aut, cre], Kurt Hornik [cbt], Zhou Qiang [cph].
- Grace** Graph-Constrained Estimation and Hypothesis Testing. Author: Sen Zhao.
- GroupTest** Multiple Testing Procedure for Grouped Hypotheses. Author: Zhigen Zhao.
- GsymPoint** Estimation of the Generalized Symmetry Point, an Optimal Cutpoint in Continuous Diagnostic Tests. Authors: Mónica López-Ratón, Carmen Cadarso-Suárez, Elisa M. Molanes-López, Emilio Letón.
- HBglm** Hierarchical Bayesian Regression for GLMs. Authors: Asad Hasan, Alireza S. Mahani.
- HDGLM** Tests for High Dimensional Generalized Linear Models. Author: Bin Guo.
- HMDHFDplus** Read HMD and HFD Data from the Web. Authors: Tim Riffe, Carl Boe, Josh Goldstein.

- HRM** High-Dimensional Repeated Measures. Authors: Martin Happ [aut, cre], Harrar W. Solomon [aut], Arne C. Bathke [aut].
- Harvest.Tree** Harvest the Classification Tree. Author: Bingyuan Liu/Yan Yuan/Qian Shi.
- HiCfeat** Multiple Logistic Regression for 3D Chromatin Domain Border Analysis. Author: Raphael Mourad.
- HydeNet** Hybrid Bayesian Networks Using R and JAGS. Authors: Jarrod E. Dalton and Benjamin Nutter.
- ICBayes** Bayesian Semiparametric Models for Interval-Censored Data. Authors: Chun Pan, Bo Cai, Lianming Wang, and Xiaoyan Lin.
- ICC.Sample.Size** Calculation of Sample Size and Power for ICC. Authors: Alasdair Rathbone [aut, cre], Saurabh Shaw [aut], Dinesh Kumbhare [aut].
- IDTurtle** Identify Turtles by their Plastral Biometries. Author: Aitor Valdeon.
- IRISMustangMetrics** Statistics and Metrics for Seismic Data. Authors: Jonathan Callahan [aut, cre], Rob Casey [aut], Mary Templeton [aut].
- IRISSeismic** Classes and Methods for Seismic Data Analysis. Authors: Jonathan Callahan [aut, cre], Rob Casey [aut], Mary Templeton [aut].
- ITEMAN** Classical Item Analysis. Author: Cengiz Zopluoglu.
- IalsaSynthesis** Synthesizing Information Across Collaborating Research. Authors: Will Beasley [aut, cre], Andrey Koval [aut], Integrative Analysis of Longitudinal Studies of Aging (IALSA) [cph].
- ImportExport** Import and Export Data. Authors: Roger Pros, Isaac Subirana, Joan Vila.
- Information** Data Exploration with Information Theory (Weight-of-Evidence and Information Value). Author: Larsen Kim [aut, cre].
- InformationValue** Performance Analysis and Companion Functions for Binary Classification Models. Author: Selva Prabhakaran.
- IntegratedJM** Joint Modelling of the Gene-Expression and Bioassay Data, Taking Care of the Effect Due to a Fingerprint Feature. Authors: Rudradev Sengupta, Nolen Joy Perualila.
- InterSIM** Simulation of Inter-Related Genomic Datasets. Authors: Prabhakar Chalise, Rama Raghavan, Brooke Fridley.
- JGEE** Joint Generalized Estimating Equation Solver. Author: Gul Inan.
- JPEN** Covariance and Inverse Covariance Matrix Estimation Using Joint Penalty. Author: Ashwini Maurya.
- JRF** Joint Random Forest (JRF) for the Simultaneous Estimation of Multiple Related Networks. Authors: Francesca Petralia [aut, cre], Pei Wang [aut], Zhidong Tu [aut], Won-min Song [aut], Adele Cutler [ctb], Leo Breiman [ctb], Andy Liaw [ctb], Matthew Wiener [ctb].
- JacobiEigen** Classical Jacobi Eigensolution Algorithm. Author: Bill Venables.
- KERE** Expectile Regression in Reproducing Kernel Hilbert Space. Authors: Yi Yang, Teng Zhang, Hui Zou.
- KoulMde** Koul's Minimum Distance Estimation in Linear Regression and Autoregression Model. Author: Jiwoong Kim [aut, cre].

- LANDD** Liquid Association for Network Dynamics Detection. Authors: Shangzhao Qiu, Yan Yan, Tianwei Yu.
- LFDR.MLE** Estimation of the Local False Discovery Rates by Type II Maximum Likelihood Estimation. Authors: Ye Yang, Marta Padilla, Alaa Ali, Kyle Leckett, Zhenyu Yang, Zuoqing Li, Corey M. Yanofsky and David R. Bickel.
- LGEWIS** Tests for Genetic Association/Gene-Environment Interaction in Longitudinal Gene-Environment-Wide Interaction Studies. Authors: Zihuai He, Seunggeun Lee, Bhramar Mukherjee, Min Zhang.
- LGRF** Set-Based Tests for Genetic Association in Longitudinal Studies. Author: Zihuai He.
- LOGIT** Functions, Data and Code for Binary and Binomial Data. Authors: Joseph M Hilbe, Rafael S. de Souza.
- LPM** Linear Parametric Models Applied to Hydrological Series. Authors: Corrado Tallorini [aut, cre], Salvatore Grimaldi [aut].
- LRcontrast** Dose Response Signal Detection under Model Uncertainty. Author: Kevin Kokot.
- LSDinterface** Reading LSD Results (.res) Files. Author: Marcelo C. Pereira.
- LSTS** Locally Stationary Time Series. Authors: Ricardo Olea, Wilfredo Palma, Pilar Rubio. In view: *TimeSeries*.
- Langevin** Langevin Analysis in One and Two Dimensions. Authors: Philip Rinn [aut, cre], Pedro G. Lind [aut], David Bastine [ctb].
- LaplaceDeconv** Laplace Deconvolution with Noisy Discrete Non-Equally Spaced Observations on a Finite Time Interval. Authors: Yves Rozenholc and Marianna Pensky.
- Libra** Linearized Bregman Algorithms for Generalized Linear Models. Authors: Feng Ruan, Jiechao Xiong and Yuan Yao.
- LifeHist** Life History Models of Individuals. Author: Ruben H. Roa-Ureta.
- LightningR** Tools for Communication with Lightning-Viz Server. Author: Ermlab.
- LinearRegressionMDE** Minimum Distance Estimation in Linear Regression Model. Author: Jiwoong Kim [aut, cre].
- LinkedMatrix** Column-Linked and Row-Linked Matrices. Authors: Gustavo de los Campos [aut], Alexander Grueneberg [aut, cre].
- LncMod** Predicting Modulator and Functional/Survival Analysis. Authors: Yongsheng Li, Zishan Wang, Juan Xu*, Xia Li*.
- LotkasLaw** Runs Lotka's Law which is One of the Special Applications of Zipf's Law. Authors: Kenneth Buker [aut, cre], Dr. Alon Friedman [ctb].
- MANCIE** Matrix Analysis and Normalization by Concordant Information Enhancement. Authors: Tao Wang, Chongzhi Zang.
- MBTA** Access Data from the Massachusetts Bay Transit Authority (MBTA) Web API. Author: Justin de Benedictis-Kessner [aut, cre].
- MCDM** Multi-Criteria Decision Making Methods. Author: Blanca A. Ceballos Martin.
- MDimNormn** Multi-Dimensional MA Normalization for Plate Effect. Author: Mun-Gwan Hong.
- MFAG** Multiple Factor Analysis (MFA). Author: Paulo Cesar Ossani Marcelo Angelo Cirillo.

- MIXFIM** Evaluation of the FIM in NLMEMs using MCMC. Authors: Marie-Karelle Riviere-Jourdan and France Mentre.
- MLCIRTwithin** Latent Class Item Response Theory Models Under Within-Item Multi-Dimensionality. Authors: Francesco Bartolucci, Silvia Bacci.
- MM2S** Single-Sample Classifier of Medulloblastoma Subtypes for Medulloblastoma Patient Samples, Mouse Models, and Cell Lines. Authors: Deena M.A. Gendoo, Benjamin Haibe-Kains.
- MM2Sdata** Gene Expression Datasets for the 'MM2S' Package. Authors: Deena M.A. Gendoo, Benjamin Haibe-Kains.
- MMWRweek** Convert Dates to MMWR Day, Week, and Year. Author: Jarad Niemi.
- MRQoL** Minimal Clinically Important Difference and Response Shift Effect for Health-Related Quality of Life. Author: Ahmad Ousmen.
- MScombine** Combine Data from Positive and Negative Ionization Mode Finding Common Entities. Author: Monica Calderon-Santiago.
- MVT** Estimation and Testing for the Multivariate t-Distribution. Author: Felipe Osorio.
- ManlyMix** Manly Mixture Modeling and Model-Based Clustering. Authors: Xuwen Zhu [aut, cre], Volodymyr Melnykov [aut], Michael Hutt [ctb, cph] (NM optimization in c), Stephen Moshier [ctb, cph] (eigen calculations in c), Rouben Rostamian [ctb, cph] (memory allocation in c).
- MatchLinReg** Combining Matching and Linear Regression for Causal Inference. Authors: Alireza S. Mahani, Mansour T.A. Sharabiani.
- MaxentVariableSelection** Selecting the Best Set of Relevant Environmental Variables along with the Optimal Regularization Multiplier for Maxent Niche Modeling. Author: Alexander Jueterbock.
- Mediana** Clinical Trial Simulations. Authors: Gautier Paux, Alex Dmitrienko.
- MethylCapSig** Detection of Differentially Methylated Regions using MethylCap-Seq Data. Authors: Deepak N. Ayyala, David E. Frankhouser, Javkhlan-Ochir Ganbat, Guido Marcucci, Ralf Bundschuh, Pearlly Yan and Shili Lin.
- MixedPoisson** Mixed Poisson Models. Authors: Alicja Wolny-Dominiak and Michal Trzeziok.
- MoTBfs** Learning Hybrid Bayesian Networks using Mixtures of Truncated Basis Functions. Authors: Inmaculada Pérez-Bernabé, Antonio Salmerón.
- MonoPhy** Allows to Explore Monophyly (or Lack of it) of Taxonomic Groups in a Phylogeny. Author: Orlando Schwery.
- MotilityLab** Quantitative Analysis of Motion. Authors: Katharina Dannenberg, Jeffrey Berry, Johannes Textor.
- MultiGHQuad** Multidimensional Gauss-Hermite Quadrature. Author: Karel Kroeze.
- MvBinary** Modelling Multivariate Binary Data with Blocks of Specific One-Factor Distribution. Authors: Matthieu Marbac and Mohammed Sedki.
- NCA** Necessary Condition Analysis. Author: Jan Dul.
- NEpiC** Network Assisted Algorithm for Epigenetic Studies Using Mean and Variance Combined Signals. Author: Peifeng Ruan.
- NIPTeR** Fast and Accurate Trisomy Prediction in Non-Invasive Prenatal Testing. Author: Dirk de Weerd.

- NetSwan** Network Strengths and Weaknesses Analysis. Author: Serge Lhomme.
- NlcOptim** Solve Nonlinear Optimization with Nonlinear Constraints. Authors: Xianyan Chen, Xiangrong Yin. In view: *Optimization*.
- NostalgIR** Advanced Text-Based Plots. Author: Hien D. Nguyen.
- OBsMD** Objective Bayesian Model Discrimination in Follow-Up Designs. Author: Marta Nai Ruscone based on Laura Deldossi's code.
- OECD** Search and Extract Data from the OECD. Author: Eric Persson [aut, cre].
- OTE** Optimal Trees Ensembles for Regression, Classification and Class Membership Probability Estimation. Authors: Zardad Khan, Asma Gul, Aris Perperoglou, Osama Mahmoud, Werner Adler, Miftahuddin and Berthold Lausen.
- OasisR** Outright Tool for the Analysis of Spatial Inequalities and Segregation. Author: Mihai Tivadar. In view: *Spatial*.
- OptGS** Near-Optimal and Balanced Group-Sequential Designs for Clinical Trials with Continuous Outcomes. Authors: James Wason [aut, cre], John Burkardt [ctb]. In view: *ExperimentalDesign*.
- OptiQuantR** Simplifies and Automates Analyzing and Reporting OptiQuant's log Data. Author: Joao Pinelo Silva [aut, cre].
- OriGen** Fast Spatial Ancestry via Flexible Allele Frequency Surfaces. Authors: John Michael O Ranola, John Novembre, and Kenneth Lange.
- OrthoPanels** Dynamic Panel Models with Orthogonal Reparameterization of Fixed Effects. Authors: Davor Cubranic [aut, cre], Mark Pickup [aut], Paul Gustafson [aut], Geoffrey Evans [aut].
- PCA4TS** Segmenting Multiple Time Series by Contemporaneous Linear Transformation. Authors: Jinyuan Chang, Bin Guo and Qiwei Yao. In view: *TimeSeries*.
- PKNCA** Perform Pharmacokinetic Non-Compartmental Analysis. Authors: Bill Denney, Clare Buckeridge.
- PRIMsrc** PRIM Survival Regression Classification. Authors: Jean-Eudes Dazard [aut, cre], Michael Choe [ctb], Michael LeBlanc [ctb], Alberto Santana [ctb].
- PabonLasso** Pabon Lasso Graphs and Comparing Situations of a Unit in Two Different Times. Authors: H Nezami and H Tabesh and AA Azarian.
- Pade** Padé Approximant Coefficients. Author: Avraham Adler [aut, cph, cre]. In view: *NumericalMathematics*.
- PanelCount** Random Effects and/or Sample Selection Models for Panel Count Data. Author: Jing Peng.
- ParallelIPC** Paralellised Versions of Constraint Based Causal Discovery Algorithms. Authors: Thuc Duy Le, Tao Hoang, Shu Hu, and Liang Zhang.
- Pasha** Preprocessing of Aligned Sequences from HTS Analyses. Authors: Romain Fenouil, Nicolas Descostes, Lionel Spinelli, Jean-Christophe Andrau.
- Perc** Using Percolation and Conductance to Find Information Flow Certainty in a Direct Network. Authors: Kevin Fujii [aut], Jian Jin [aut, cre], Aaron Shev [aut], Brianne Beisner [aut], Brenda McCowan [aut, cph], Hsieh Fushing [aut, cph].
- PharmacoGx** Analysis of Large-Scale Pharmacogenomic Data. Authors: Petr Smirnov, Zhaleh Safikhani, Benjamin Haibe-Kains.

- Phxnlme** Run Phoenix NLME and Perform Post-Processing. Authors: Chay Ngee Lim [aut,cre], Shuang Liang [aut], Kevin Feng [aut,cre], Grygoriy Vasilinin [aut], Angela Birnbaum [aut,ths], Jason Chittenden [aut], Bob Leary [ctb], Ana Henry [ctb], Mike Dunlavey [ctb], Samer Mouksassi [com].
- PlotPrjNetworks** Useful Networking Tools for Project Management. Author: Javier Celigueta Muñoz.
- PortfolioEffectEstim** High Frequency Price Estimators by PortfolioEffect. Authors: Andrey Kostin [aut, cre], Aleksey Zemnitskiy [aut], Oleg Nechaev [aut].
- PortfolioEffectHFT** High Frequency Portfolio Analytics by PortfolioEffect. Authors: Aleksey Zemnitskiy [aut, cre], Andrey Kostin [aut], Oleg Nechaev [aut], Craig Otis and others [ctb, cph] (OpenFAST library), Daniel Lemire, Muraoka Taro and others [ctb, cph] (JavaFastPFOR library), Joe Walnes, Jorg Schaible and others [ctb, cph] (XStream library), Dain Sundstrom [ctb, cph] (Snappy library), Extreme! Lab, Indiana University [ctb, cph] (XPP3 library), The Apache Software Foundation [ctb, cph] (Apache Log4j and Commons Lang libraries), Google, Inc. [ctb, cph] (GSON library), Free Software Foundation [ctb, cph] (GNU Trove and GNU Crypto libraries). In view: *Finance*.
- ProNet** Biological Network Construction, Visualization and Analyses. Authors: Xiang-Yun Wu and Xia-Yu Xia.
- ProTrackR** Manipulate and Play ‘ProTracker’ Modules. Author: Pepijn de Vries [aut, cre, dtc].
- PsiHat** Several Local False Discovery Rate Estimators. Authors: Alaa Ali, Kyle Leckett, Marta Padilla, David R. Bickel (contributions from Bradley Efron, Brit B. Turnbull, Balasubramanian Narasimhan from package locfdr).
- PythonInR** Use Python from Within R. Author: Florian Schwendinger [aut, cre].
- QPot** Quasi-Potential Analysis for Stochastic Differential Equations. Authors: Christopher Moore [aut], Christopher Stieha [aut, cre], Ben Nolting [aut], Maria Cameron [aut], Karen Abbott [aut], James Gregson [cph] (author of expression_parser library: https://github.com/jamesgregson/expression_parser).
- QuantumClone** Clustering Mutations using High Throughput Sequencing (HTS) Data. Author: Paul Deveau [aut, cre].
- RClone** Partially Clonal Populations Analysis. Authors: Sophie Arnaud-Haond [aut], Diane Bailleul [aut, cre], CLONIX [ctb].
- RCriteo** Loading Criteo Data into R. Author: Johannes Burkhardt.
- RFormatter** R Source Code Formatter. Author: Benjamin Fischer [aut, cre].
- RGoogleAnalyticsPremium** Unsampled Data in R for Google Analytics Premium Accounts. Author: Jalpa Joshi Dave.
- RKlout** Fetch Klout Scores for Twitter Users. Author: Binayak Goswami.
- RMixpanel** R API for Mixpanel. Author: Meinhard Ploner.
- RNaviCell** Visualization of High-Throughput Data on Large-Scale Biological Networks. Authors: Eric Bonnet [aut, cre], Paul Deveau [aut].
- RNeo4j** Neo4j Driver for R. Author: Nicole White.
- ROMIplot** Plots Surfaces of Rates of Mortality Improvement. Authors: Roland Rau, Tim Riffe.
- ROptimizely** R Optimizely API. Authors: Keerthi Chandra [aut, cre], Chris Johannessen [aut], Siddharth Somayajula [ctb].

- RRNA** Secondary Structure Plotting for RNA. Author: JP Bida.
- RStoolbox** Tools for Remote Sensing Data Analysis. Authors: Benjamin Leutner [cre, aut], Ned Horning [aut].
- RViennaCL** ViennaCL C++ Header Files. Author: Charles Determan Jr.
- RateDistortion** Routines for Solving Rate-Distortion Problems. Author: Chris R. Sims.
- Rblpapi** R Interface to Bloomberg. Authors: Whit Armstrong, Dirk Eddelbuettel and John Laing. In view: *Finance*.
- Rcereal** C++ Header Files of ‘cereal’. Authors: Wush Wu, Randolph Voorhies, and Shane Grant.
- RcppFaddeeva** ‘Rcpp’ Bindings for the ‘Faddeeva’ Package. Authors: Baptiste Auguie [aut, cre], Dirk Eddelbuettel [aut], Steven G. Johnson [aut] (Author of Faddeeva).
- RcppShark** R Interface to the Shark Machine Learning Library. Author: Aydin Demircioglu.
- RedditExtractor** Reddit Data Extraction Toolkit. Author: Ivan Rivera.
- Relatedness** An Algorithm to Infer Relatedness. Author: Fabien Laporte.
- RepeatABEL** GWAS for Multiple Observations on Related Individuals. Author: Lars Ronnegard.
- RevEcoR** Reverse Ecology Analysis on Microbiome. Authors: Yang Cao, Fei Li.
- Rip46** Utils for IP4 and IP6 Addresses. Author: Neal Fultz.
- RobustEM** Robust Mixture Modeling Fitted via Spatial-EM Algorithm for Model-Based Clustering and Outlier Detection. Authors: Aishat Aloba, Kai Yu, Xin Dang, Yixin Chen, and Henry Bart Jr.
- Rphylopars** Phylogenetic Comparative Tools for Missing Data and Within-Species Variation. Authors: Eric W. Goolsby, Jorn Bruggeman, Cecile Ane.
- Rsurrogate** Robust Estimation of the Proportion of Treatment Effect Explained by Surrogate Marker Information. Author: Layla Parast.
- Rtwalk** The R Implementation of the ‘t-walk’ MCMC Algorithm. Author: J Andres Christen.
- RxODE** Facilities for Simulating from ODE-Based Models. Authors: Melissa Hallow [aut, cre], Wenping Wang [aut], David A. James [aut].
- SACCR** SA Counterparty Credit Risk under Basel III. Author: Tasos Grivas.
- SACOBRA** Self-Adjusting COBRA. Authors: Wolfgang Konen [aut], Samineh Bagheri [cre, aut], Patrick Koch [aut].
- SAGA** Software for the Analysis of Genetic Architecture. Authors: Heath Blackmon and Jeffery P. Demuth.
- SALTsampler** Efficient Sampling on the Simplex. Authors: Hannah Director, Scott Vander Wiel, James Gattiker.
- SDR** Subgroup Discovery Algorithms for R. Authors: Angel M. Garcia [aut, cre], Pedro Gonzalez [aut, cph], Cristobal J. Carmona [aut, cph], Francisco Charte [ctb].
- SEHmodel** Spatial Exposure-Hazard Model for Exposure and Impact Assessment on Exposed Individuals. Authors: Marc Bourotte [ctb], Melen Leclerc [aut], Jean-Francois Rey [aut, cre], Samuel Soubeyrand [ctb], Emily Walker [aut].

- SHELF** Tools to Support the Sheffield Elicitation Framework (SHELF). Author: Jeremy Oakley.
- SIBER** Stable Isotope Bayesian Ellipses in R. Authors: Andrew Jackson and Andrew Parnell.
- SOPIE** Non-Parametric Estimation of the Off-Pulse Interval of a Pulsar. Author: Willem Daniel Schutte.
- SPCALDA** A New Reduced-Rank Linear Discriminant Analysis Method. Authors: Yue S. Niu, Ning Hao, and Bin Dong.
- SSRMST** Sample Size Calculation using Restricted Mean Survival Time. Author: Miki Horiguchi.
- STAND** Statistical Analysis of Non-Detects. Authors: E. L. Frome and D. P. Frome.
- STI** Calculation of the Standardized Temperature Index. Author: Marc Fasel [aut, cre].
- STMedianPolish** Spatio-Temporal Median Polish. Authors: William Martinez, Carlos Melo. In view: *SpatioTemporal*.
- SchemaOnRead** Automated Schema on Read. Author: Michael North [aut, cre].
- Sejong** KoNLP static dictionaries and Sejong project resources. Author: Heewon Jeon.
- SensMixed** Analysis of Sensory and Consumer Data in a Mixed Model Framework. Authors: Alexandra Kuznetsova [aut, cre], Per Bruun Brockhoff [aut, ths], Rune Haubo Bojesen Christensen [aut].
- ShapeChange** Change-Point Estimation using Shape-Restricted Splines. Authors: Xiyue Liao and Mary C Meyer.
- Shrinkage** Several Shrinkage Effect-Size Estimators. Authors: Corey M. Yanofsky, Zahra Montazeri, Marta Padilla, Alaa Ali and David R. Bickel.
- SimDesign** Structure for Organizing Monte Carlo Simulation Designs. Author: Phil Chalmers [aut, cre].
- SimHaz** Simulated Survival and Hazard Analysis for Time-Dependent Exposure. Authors: Danyi Xiong, Teeranan Pokaparakarn, Hiroto Udagawa, Nusrat Rabbee.
- SimReg** Similarity Regression Functions. Author: Daniel Greene.
- SocialMediaLab** Tools for Collecting Social Media Data and Generating Networks for Analysis. Author: Timothy Graham & Robert Ackland.
- Sofi** Interfaz interactiva con fines didacticos. Author: Jose D. Loera.
- SoyNAM** Soybean Nested Association Mapping Dataset. Authors: Alencar Xavier, William Beavis, James Specht, Brian Diers, Reka Howard, William Muir, Katy Rainey.
- SpaDES** Develop and Run Spatially Explicit Discrete Event Simulation Models. Authors: Alex M Chubaty [aut, cre], Eliot J B McIntire [aut], Steve Cumming [ctb], Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources Canada [cph].
- SparseFactorAnalysis** Scaling Count and Binary Data with Sparse Factor Analysis. Authors: Marc Ratkovic, In Song Kim, John Londregan, and Yuki Shiraito.
- SparseLearner** Sparse Learning Algorithms Using a LASSO-Type Penalty for Coefficient Estimation and Model Prediction. Authors: Pi Guo, Yuantao Hao.
- StMoMo** Stochastic Mortality Modelling. Authors: Andres Villegas, Pietro Millosovich, Vladimir Kaishev.

- StockChina** Real-Time Stock Price & Volume in China Market. Author: Xiaodong Deng.
- SuperExactTest** Exact Test and Visualization of Multi-Set Intersections. Authors: Minghui Wang, Yongzhong Zhao and Bin Zhang.
- SurvRank** Rank Based Survival Modelling. Author: Michael Laimighofer [aut, cre, ctb].
- SwarmSVM** Ensemble Learning Algorithms Based on Support Vector Machines. Authors: Tong He, Aydin Demircioglu.
- SyncMove** Subsample Temporal Data to Synchronal Events and Compute the MCI. Authors: Martin Rimmeler [aut, cre], Thomas Mueller [aut].
- TCGA2STAT** Simple TCGA Data Access for Integrated Statistical Analysis in R. Authors: Ying-Wooi Wan, Genevera I. Allen, Matthew L. Anderson, Zhandong Liu.
- TLBC** Two-Level Behavior Classification. Author: Katherine Ellis.
- TMB** Template Model Builder: A General Random Effect Tool Inspired by ADMB. Authors: Kasper Kristensen [aut, cre, cph], Brad Bell [cph], Hans Skaug [ctb], Arni Magnusson [ctb], Casper Berg [ctb], Anders Nielsen [ctb], Martin Maechler [ctb], Theo Michelot [ctb], Mollie Brooks [ctb], Cole Monnahan [ctb].
- TMDb** Access to TMDb API - Apiary. Author: Andrea Capozio.
- TOC** Total Operating Characteristic Curve and ROC Curve. Authors: Robert G. Pontius, Ali Santacruz, Amin Tayyebi, Benoit Parmentier, Kangping Si.
- TP.idm** Estimation of Transition Probabilities for the Illness-Death Model. Authors: Vanesa Balboa-Barreiro, Jacobo de Una-Alvarez and Luis Meira-Machado.
- TRADER** Tree Ring Analysis of Disturbance Events in R. Authors: Pavel Fibich, Jan Altman, Tuomas Aakala, Jiri Dolezal.
- TSMining** Mining Univariate and Multivariate Motifs in Time-Series Data. Author: Cheng Fan. In view: *TimeSeries*.
- TSTr** Ternary Search Tree for Auto-Completion and Spell Checking. Authors: Ricardo Merino [aut, cre], Samantha Fernandez [ctb].
- TTS** Master Curve Estimates Corresponding to Time-Temperature Superposition. Authors: Antonio Meneses, Salvador Naya, Javier Tarrio-Saavedra.
- TauStar** Efficient Computation of the t^* Statistic of Bergsma and Dassios (2014). Authors: Luca Weihs [aut, cre], Emin Martinian [ctb] (Created the red-black tree library included in package.).
- TestingSimilarity** Bootstrap Test for Similarity of Dose Response Curves Concerning the Maximum Absolute Deviation. Author: Kathrin Moellenhoff.
- TipDatingBeast** Using Tip Dates with Phylogenetic Trees in BEAST. Authors: Adrien Rieux, Camilo Khatchikian.
- Tmisc** Turner Miscellaneous. Author: Stephen Turner.
- Traitspace** A Predictive Model for Trait Based Community Assembly of Plant Species. Authors: Chaitanya Joshi, Xin Li, Daniel Laughlin.
- TransModel** Fit Linear Transformation Models for Censored Data. Authors: Jie Zhou, Jiajia Zhang, Wenbin Lu.
- TruncatedNormal** Truncated Multivariate Normal. Author: Zdravko I. Botev.
- UncerIn2** Implements Models of Uncertainty into the Interpolation Functions. Author: Tomas Burian.

- UpSetR** A More Scalable Alternative to Venn and Euler Diagrams for Visualizing Intersecting Sets. Authors: Jake Conway [cre], Nils Gehlenborg [aut].
- VTrack** A Collection of Tools for the Analysis of Remote Acoustic Telemetry Data. Authors: Ross G. Dwyer, Mathew E. Watts, Hamish A. Campbell & Craig E. Franklin.
- WiSEBoot** Wild Scale-Enhanced Bootstrap. Authors: Megan Heyman, Snigdhasu Chatterjee.
- WikidataR** API Client Library for 'Wikidata'. Authors: Oliver Keyes [aut, cre], Christian Gaul [ctb].
- WufooR** R Wrapper for the 'Wufoo.com' - The Form Building Service. Author: John Malc.
- XHWE** X Chromosome Hardy-Weinberg Equilibrium. Authors: Xiao-Ping You, Qi-Lei Zou, Jian-Long Li, Ji-Yuan Zhou.
- XMRF** Markov Random Fields for High-Throughput Genetics Data. Authors: Ying-Wooi Wan, Genevera I. Allen, Yulia Baker, Eunho Yang, Pradeep Ravikumar, Zhandong Liu.
- ZRA** Dynamic Plots for Time Series Forecasting. Author: David Beiner.
- aTSA** Alternative Time Series Analysis. Author: Debin Qiu.
- abbyyR** Access to Abbyy Optical Character Recognition (OCR) API. Author: Gaurav Sood [aut, cre].
- abcrf** Approximate Bayesian Computation via Random Forests. Authors: Jean-Michel Marin [aut], Pierre Pudlo [aut, cre], Christian P. Robert [ctb].
- abodOutlier** Angle-Based Outlier Detection. Author: Jose Jimenez.
- acmeR** Implements ACME Estimator of Bird and Bat Mortality by Wind Turbines. Authors: Robert Wolpert [aut, cre], Jacob Coleman [aut].
- addhazard** Fit Additive Hazards Models for Survival Analysis. Authors: Jie (Kate) Hu [aut, cre], Norman Breslow [aut], Gary Chan [aut].
- alineR** Alignment of Phonetic Sequences Using the 'ALINE' Algorithm. Authors: Sean Downey [aut, cre], Guowei Sun [aut].
- ameco** European Commission Annual Macro-Economic (AMECO) Database. Author: Eric Persson [aut, cre].
- analogsea** Interface to 'Digital Ocean'. Authors: Scott Chamberlain [aut, cre], Hadley Wickham [aut], Winston Chang [aut], RStudio [cph].
- anonymizer** Anonymize Data Containing Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- aop** Adverse Outcome Pathway Analysis. Author: Lyle D. Burgoon.
- apaStyle** Generate APA Tables for MS Word. Author: Jort de Vreeze [aut, cre]. In view: *ReproducibleResearch*.
- apaTables** Create American Psychological Association (APA) Style Tables. Author: David Stanley [aut, cre].
- appnn** Amyloid Propensity Prediction Neural Network. Authors: Carlos Família, Sarah R. Dennison, Alexandre Quintas, David A. Phoenix.
- apricom** Tools for the a Priori Comparison of Regression Modelling Strategies. Authors: Romin Pajouheshnia [aut, cre], Wiebe Pestman [aut], Rolf Groenwold [aut].
- arqas** Application in R for Queueing Analysis and Simulation. Author: Borja Varela.

- artfima** Fit ARTFIMA Model. Authors: A. I. McLeod, Farzad Sabzikar, Mark M. Meerschaert.
- asdreader** Reading ASD Binary Files in R. Author: Pierre Roudier [aut, cre].
- asht** Applied Statistical Hypothesis Tests. Author: Michael P. Fay.
- asremlPlus** Augments the Use of 'Asreml' in Fitting Mixed Models. Author: Chris Brien.
- assertive.base** A Lightweight Core of the 'assertive' Package. Authors: Richard Cotton [aut, cre], Sunkyu Choi [trl], Ivanka Skakun [trl], Gergely Daroczi [trl], Anton Antonov [trl], Hisham Ben Hamidane [trl], Anja Billing [trl], Aditya Bhagwat [trl], Rasmus Baath [trl], Mine Cetinkaya-Rundel [trl], Aspasia Chatziefthymiou [trl].
- assertive.code** Assertions to Check Properties of Code. Author: Richard Cotton [aut, cre].
- assertive.data** Assertions to Check Properties of Data. Author: Richard Cotton [aut, cre].
- assertive.data.uk** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.data.us** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.datetimes** Assertions to Check Properties of Dates and Times. Author: Richard Cotton [aut, cre].
- assertive.files** Assertions to Check Properties of Files. Author: Richard Cotton [aut, cre].
- assertive.matrices** Assertions to Check Properties of Matrices. Author: Richard Cotton [aut, cre].
- assertive.models** Assertions to Check Properties of Models. Author: Richard Cotton [aut, cre].
- assertive.numbers** Assertions to Check Properties of Numbers. Author: Richard Cotton [aut, cre].
- assertive.properties** Assertions to Check Properties of Variables. Author: Richard Cotton [aut, cre].
- assertive.reflection** Assertions for Checking the State of R. Author: Richard Cotton [aut, cre].
- assertive.sets** Assertions to Check Properties of Sets. Author: Richard Cotton [aut, cre].
- assertive.strings** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.types** Assertions to Check Types of Variables. Author: Richard Cotton [aut, cre].
- autovarCore** Automated Vector Autoregression Models and Networks. Author: Ando Emerencia [aut, cre]. In view: *TimeSeries*.
- averisk** Calculation of Average Population Attributable Fractions and Confidence Intervals. Author: John Ferguson [aut, cre].
- bWGR** Bagging Whole-Genome Regression. Authors: Alencar Xavier, William Muir, Katy Rainey.
- backShift** Learning Causal Cyclic Graphs from Unknown Shift Interventions. Author: Christina Heinze.
- backpipe** Backward Pipe Operator. Authors: Christopher Brown [cre, aut], Decision Patterns [cph].

- backtestGraphics** Interactive Graphics for Portfolio Data. Authors: David Kane, Ziqi Lu, Fan Zhang, Miller Zijie Zhu.
- bacr** Bayesian Adjustment for Confounding. Author: Chi Wang.
- bapred** Batch Effect Removal (in Phenotype Prediction using Gene Data). Authors: Roman Hornung, David Causeur.
- batman** Convert Categorical Representations of Logicals to Actual Logicals. Authors: Oliver Keyes [aut, cre], Ruben C. Arslan [ctb], Christopher Akiki [ctb], Mine Cetinkaya-Rundel [ctb], Peter Meissner [ctb], Ilaria Prosdocimi [ctb], Thomas Leeper [ctb], Amy Lee [ctb], Adolfo Álvarez [ctb].
- batteryreduction** An R Package for Data Reduction by Battery Reduction. Authors: Chunqiao Luo [aut, cre], Ralph D'Agostino [aut].
- bcRep** Advanced Analysis of B Cell Receptor Repertoire Data. Author: Julia Bischof.
- bcrypt** 'Blowfish' Password Hashing Algorithm. Authors: Jeroen Ooms [cre, aut], Damien Miller [cph], Niels Provost [cph].
- bdots** Bootstrapped Differences of Time Series. Authors: Michael Seedorff, Jacob Oleson, Grant Brown, Joseph Cavanaugh, and Bob McMurray.
- bedr** Genomic Region Processing using Tools Such as Bedtools, Bedops and Tabix. Authors: Daryl Waggott, Syed Haider, Emilie Lalonde, Clement Fung, Paul C. Boutros.
- betalink** Beta-Diversity Within a Metaweb of Species Interactions. Author: Timothee Poisot.
- bimixt** Estimates Mixture Models for Case-Control Data. Authors: Michelle Winerip, Garrick Wallstrom, Joshua LaBaer.
- biomartR** Functional Annotation and Biological Data Retrieval with R. Author: Hajk-Georg Drost.
- blavaan** Bayesian Latent Variable Analysis. Authors: Edgar Merkle [aut, cre], Yves Rosseel [aut].
- bmata** A Package for Bayesian Meta-Analysis and Meta-Regression. Authors: Tao Ding, Gianluca Baio.
- bnclassify** Learning Discrete Bayesian Network Classifiers from Data. Authors: Mihaljevic Bojan [aut, cre], Bielza Concha [aut], Larranaga Pedro [aut], Wickham Hadley [ctb] (some code extracted from memoise package). In view: [MachineLearning](#).
- bnstruct** Bayesian Network Structure Learning from Data with Missing Values. Authors: Francesco Sambo [aut, cre], Alberto Franzin [aut].
- brotli** A Compression Format Optimized for the Web. Authors: Jeroen Ooms [aut, cre], Google, Inc [aut, cph] (Brotli C++ library).
- brr** Bayesian Inference on the Ratio of Two Poisson Rates. Author: Stéphane Laurent.
- brranching** Fetch Phylogenies from Many Sources. Author: Scott Chamberlain [aut, cre].
- bssn** Birnbaum-Saunders Model Based on Skew-Normal Distribution. Authors: Rocío Paola Maehara and Luis Benites Sanchez.
- btergm** Temporal Exponential Random Graph Models by Bootstrapped Pseudolikelihood. Authors: Philip Leifeld [aut, cre], Skyler J. Cranmer [ctb], Bruce A. Desmarais [ctb].
- caRpoools** CRISPR AnalyzeR for Pooled CRISPR Screens. Authors: Jan Winter, Florian Heigwer.
- calACS** Count All Common Subsequences. Author: Alan Gu.

- camtrapR** Camera Trap Data Management and Preparation of Occupancy and Spatial Capture-Recapture Analyses. Authors: Juergen Niedballa [aut, cre], Alexandre Courtiol [aut], Rahel Sollmann [aut], John Mathai [ctb], Seth Timothy Wong [ctb], An The Truong Nguyen [ctb], Azlan bin Mohamed [ctb], Andrew Tilker [ctb], Andreas Wilting [ctb, ths].
- captioner** Numbers Figures and Creates Simple Captions. Author: Letaw Alatheia [aut, cre].
- captr** Client for the Captricity API. Author: Gaurav Sood [aut, cre].
- cardioModel** Cardiovascular Safety Exposure-Response Modeling in Early-Phase Clinical Studies. Authors: Daniela J Conrado [aut, cre], William S Denney [aut], Gregory J Hather [aut], Danny Chen [ctb].
- cartography** Thematic Cartography. Authors: Timothée Giraud [cre, aut], Nicolas Lambert [aut].
- cate** High Dimensional Factor Analysis and Confounder Adjusted Testing and Estimation. Authors: Jingshu Wang [aut], Qingyuan Zhao [aut, cre].
- causaldrf** Tools for Estimating Causal Dose Response Functions. Authors: Douglas Galagate [cre], Joseph Schafer [aut].
- cdcfluview** Retrieve U.S. Flu Season Data from the CDC FluView Portal. Author: Bob Rudis.
- chunked** Chunkwise Text-File Processing for ‘dplyr’. Author: Edwin de Jonge.
- ckanr** Client for the Comprehensive Knowledge Archive Network (‘CKAN’) API. Authors: Scott Chamberlain [aut, cre], Imanuel Costigan [ctb], Wush Wu [ctb], Florian Mayer [ctb].
- clarifai** Access to Clarifai API. Author: Gaurav Sood [aut, cre].
- cleangeo** Cleaning Geometries from Spatial Objects. Author: Emmanuel Blondel.
- climrends** Statistical Methods for Climate Sciences. Author: Jose Gama [aut, cre].
- clipr** Read and Write from the System Clipboard. Authors: Matthew Lincoln [aut, cre], Louis Maddox [ctb].
- clisymbols** Unicode Symbols at the R Prompt. Authors: Gabor Csardi [aut, cre], Sindre Sorhus [aut].
- clogitboost** Boosting Conditional Logit Model. Authors: Haolun Shi [aut, cre], Guosheng Yin [aut].
- clttools** Central Limit Theorem Experiments (Theoretical and Simulation). Authors: Simiao Ye, Jingning Mei.
- cmsaf** Tools for CM SAF Netcdf Data. Author: Steffen Kothe.
- cnmlcd** Maximum Likelihood Estimation of a Log-Concave Density Function. Authors: Yu Liu, Yong Wang.
- coala** A Framework for Coalescent Simulation. Authors: Paul Staab [aut, cre, cph], Dirk Metzler [ths].
- codyn** Community Dynamics Metrics. Authors: Lauren Hallett [aut], Sydney K. Jones [aut], Andrew A. MacDonald [aut], Dan F. B. Flynn [aut], Peter Slaughter [aut], Julie Ripplinger [aut], Scott L. Collins [aut], Corinna Gries [aut], Matthew B. Jones [aut, cre].
- colorhplot** Colorful Hierarchical Clustering Dendrograms. Author: Damiano Fantini.

- cometExactTest** Exact Test from the Combinations of Mutually Exclusive Alterations (CoMEt) Algorithm. Authors: Max Leiserson [aut, cre], Hsin-Ta Wu [aut], Fabio Vandin [ctb], Vivian Hsiao [ctb], Benjamin Raphael [ctb].
- conover.test** Conover-Iman Test of Multiple Comparisons Using Rank Sums. Author: Alexis Dinno.
- contoureR** Contouring of Non-Regular Three-Dimensional Data. Author: Nicholas Hamilton.
- controlTest** Median Comparison for Two-Sample Right-Censored Survival Data. Author: Eric Kawaguchi.
- convoSPAT** Convolution-Based Nonstationary Spatial Modeling. Author: Mark D. Risser [aut, cre].
- cord** Community Estimation in G-Models via CORD. Authors: Xi (Rossi) LUO, Florentina Bunea, Christophe Giraud.
- coreNLP** Wrappers Around Stanford CoreNLP Tools. Authors: Taylor Arnold, Lauren Tilton.
- corkscrew** Preprocessor for Data Modeling. Authors: Navin Loganathan [aut], Mohan Manivannan [aut], Santhosh Sasanapuri [aut, cre], LatentView Analytics [ctb].
- corregp** Functions and Methods for Correspondence Regression. Author: Koen Plevoets [aut, cre].
- covBM** Brownian Motion Processes for ‘nlme’ Models. Author: Oliver Stirrup [aut, cre].
- covmat** Covariance Matrix Estimation. Author: Rohit Arora. In view: *Finance*.
- cowplot** Streamlined Plot Theme and Plot Annotations for ‘ggplot2’. Authors: Claus O. Wilke [aut, cre], Hadley Wickham [cph].
- cowsay** Messages, Warnings, Strings with Ascii Animals. Authors: Scott Chamberlain [aut, cre], Tyler Rinker [aut], Thomas Leeper [aut], Noam Ross [aut], Rich FitzJohn [aut], Carson Sievert [aut], Kiyoko Gotanda [aut], Andy Teucher [aut], Karl Broman [aut], Franz-Sebastian Krah [aut].
- cpgen** Parallelized Genomic Prediction and GWAS. Author: Claas Heuer.
- creditr** Credit Default Swaps in R. Authors: Heidi Chen, Yuanchu Dang, David Kane, Yang Lu, Skylar Smith, Kanishka Malik, and Miller Zijie Zhu.
- credule** Credit Default Swap Functions. Authors: Bertrand Le Nezet [cre, aut, cph], Richard Brent [ctb, cph], John Burkardt [ctb, cph]. In view: *Finance*.
- crmPack** Object-Oriented Implementation of CRM Designs. Authors: Daniel Sabanes Bove, Wai Yin Yeung, Giuseppe Palermo, Thomas Jaki.
- crop** Graphics Cropping Tool. Author: Marius Hofert [aut, cre].
- crrp** Penalized Variable Selection in Competing Risks Regression. Author: Zhixuan Fu.
- crskdiag** Diagnostics for Fine and Gray Model. Author: Jianing Li.
- cruts** Interface to Climatic Research Unit Time-Series Version 3.21 Data. Author: Benjamin M. Taylor.
- ctmcmove** Modeling Animal Movement with Continuous-Time Discrete-Space Markov Chains. Author: Ephraim Hanks. In view: *SpatioTemporal*.
- ctmm** Continuous-Time Movement Modeling. Authors: Chris H. Fleming and J. M. Calabrese. In view: *SpatioTemporal*.

- ctsem** Continuous Time Structural Equation Modelling. Authors: Manuel Voelkle [aut, cph] (Original development of continuous time model specification within OpenMx, advisor for further development), Han Oud [aut, cph] (Original development of continuous time model specification within OpenMx), Charles Driver [aut, cre, cph] (Further development of continuous time model specification within OpenMx, package development, documentation and maintenance).
- cvxbiclust** Convex Biclustering Algorithm. Authors: Eric C. Chi, Genevera I. Allen, Richard G. Baraniuk.
- cycleRtools** Tools for Cycling Data Analysis. Author: Jordan Mackie [aut, cre].
- cymruservices** Query Team Cymru IP Address, Autonomous System Number (ASN), Border Gateway Protocol (BGP), Bogon and Malware Hash Data Services. Author: Bob Rudis [aut, cre].
- d3heatmap** Interactive Heat Maps Using ‘htmlwidgets’ and ‘D3.js’. Authors: Joe Cheng [aut, cre], Tal Galili [aut], RStudio, Inc. [cph], Michael Bostock [ctb, cph] (D3.js library), Justin Palmer [ctb, cph] (d3.tip library).
- dMod** Dynamic Modeling and Parameter Estimation in ODE Models. Author: Daniel Kaschek.
- dad** Three-Way Data Analysis Through Densities. Authors: Rachid Boumaza, Pierre Santagostini, Smail Yousfi, Sabine Demotes-Mainard.
- datafsm** Estimating Finite State Machine Models from Data. Authors: Nay John J. [cre, aut], Gilligan Jonathan M. [aut].
- dataonderivatives** Easily Source Publicly Available Data on Derivatives. Author: Imanuel Costigan [aut, cre].
- datastepr** An Implementation of a SAS-Style Data Step. Author: Brandon Taylor.
- dbscan** Density Based Clustering of Applications with Noise (DBSCAN) and Related Algorithms. Authors: Michael Hahsler [aut, cre, cph], Sunil Arya [ctb, cph], David Mount [ctb, cph]. In view: [Cluster](#).
- dc3net** Inferring Disease Networks via Differential Network Inference. Author: Gokmen Altay.
- ddR** Distributed Data Structures in R. Authors: Edward Ma, Indrajit Roy, Michael Lawrence.
- deformula** Integration of One-Dimensional Functions with Double Exponential Formulas. Author: Hiroyuki Okamura.
- dequer** An R ‘Deque’ Container. Author: Drew Schmidt [aut, cre].
- describer** Describe Data in R Using Common Descriptive Statistics. Author: Paul Hendricks [aut, cre].
- desiR** Desirability Functions for Ranking, Selecting, and Integrating Data. Author: Stanley E. Lazic.
- detector** Detect Data Containing Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- diezeit** R Interface to the ZEIT ONLINE Content API. Author: Christian Graul.
- diffR** Display Differences Between Two Files using Codediff Library. Author: John Muschelli [aut, cre].
- dina** Bayesian Estimation of DINA Model. Author: Steven Andrew Culpepper [aut, cph, cre].

- distcomp** Computations over Distributed Data without Aggregation. Authors: Balasubramanian Narasimhan [aut, cre], Marina Bendersky [aut], Sam Gross [aut], Terry M. Therneau [ctb], Thomas Lumley [ctb].
- diverse** Diversity Measures for Complex Systems. Authors: Miguel R. Guevara, Dominik Hartmann, Marcelo Mendoza.
- dml** Distance Metric Learning in R. Authors: Yuan Tang, Gao Tao, Xiao Nan.
- docopulae** Optimal Designs for Copula Models. Author: Andreas Rappold [aut, cre].
- docxtractr** Extract Data Tables from Microsoft Word Documents. Author: Bob Rudis [aut, cre].
- dotwhisker** Dot-and-Whisker Plots of Regression Results. Authors: Frederick Solt, Yue Hu.
- downscale** Downscaling Species Occupancy. Author: Charles Marsh [aut, cre].
- drLumi** Multiplex Immunoassays Data Analysis. Authors: Hector Sanz [aut, cre], John Aponte [aut], Jaroslaw Harezlak [aut], Yan Dong [aut], Magdalena Murawska [aut], Clarissa Valim [aut], Aintzane Ayestaran [ctb], Ruth Aguilar [ctb], Gemma Moncunill [ctb].
- dtwSat** Time-Weighted Dynamic Time Warping for Remote Sensing Time Series Analysis. Author: Victor Maus [aut, cre].
- dtwclust** Time Series Clustering with Dynamic Time Warping. Author: Alexis Sarda-Espinosa. In view: *TimeSeries*.
- easyVerification** Ensemble Forecast Verification for Large Datasets. Authors: Jonas Bhend [aut, cre], Jacopo Ripoldi [ctb], Claudia Mignani [ctb], Irina Mahlstein [ctb], Rebecca Hiller [ctb], Christoph Spirig [ctb], Mark Liniger [ctb], Andreas Weigel [ctb], Joaquín Bedia Jimenez [ctb], Matteo De Felice [ctb].
- easypower** Sample Size Estimation for Experimental Designs. Author: Aaron McGarvey.
- ecospace** Simulating Community Assembly and Ecological Diversification Using Ecospace Frameworks. Author: Phil Novack-Gottshall [aut, cre].
- ecotoxicology** Methods for Ecotoxicology. Author: Jose Gama [aut, cre, trl].
- edgar** Platform for EDGAR Filing Management. Authors: Gunratan Lonare, Bharat Patil.
- edgebundleR** Circle Plot with Bundled Edges. Authors: Garth Tarr [aut, cre], Ellis Patrick [aut], Kent Russell [ctb].
- eel** Extended Empirical Likelihood. Authors: Fan Wu and Yu Zhang.
- eemR** Tools for Pre-Processing Emission-Excitation-Matrix (EEM). Author: Philippe Massicotte [aut, cre].
- efflog** The Causal Effects for a Causal Loglinear Model. Author: Gloria Gheno [aut, cre].
- elasso** Enhanced Least Absolute Shrinkage and Selection Operator Regression Model. Author: Pi Guo.
- epandist** Statistical Functions for the Censored and Uncensored Epanechnikov Distribution. Author: Mathias Borritz Milfeldt [aut, cre].
- epanetReader** Read Epanet Files into R. Author: Bradley J. Eck.
- epiDisplay** Epidemiological Data Display Package. Author: Virasakdi Chongsuvivatwong.
- epifit** Flexible Modelling Functions for Epidemiological Data Analysis. Authors: Kazutaka Doi [aut, cre], Kei Sakabe [ctb], Masataka Taruri [ctb].

- erp.easy** Event-Related Potential (ERP) Data Exploration Made Easy. Author: Travis Moore [aut, cre].
- etma** Epistasis Test in Meta-Analysis (ETMA). Author: Chin Lin. In view: [MetaAnalysis](#).
- exreport** Fast, Reliable and Elegant Reproducible Research. Authors: Jacinto Arias [aut, cre], Javier Cozar [aut].
- extremogram** Estimation of Extreme Value Dependence for Time Series Data. Authors: Nadezda Frolova, Ivor Cribben.
- eyetrackingR** Eye-Tracking Data Analysis. Authors: Jacob Dink [aut, cre], Brock Ferguson [aut].
- ezec** Easy Interface to Effective Concentration Calculations. Authors: Zhian N. Kamvar [cre, aut], Niklaus J. Grunwald [ths, ctb].
- ezsummary** Summarise Data in the Quick and Easy Way. Author: Hao Zhu [aut, cre].
- fancycut** A Fancy Version of ‘base::cut’. Author: Adam Rich [aut, cre].
- fastdigest** Fast, Low Memory-Footprint Digests of R Objects. Authors: Gabriel Becker, Bob Jenkins (SpookyHash algorithm and C++ implementation).
- fasttime** Fast Utility Function for Time Parsing and Conversion. Author: Simon Urbanek.
- favnums** A Dataset of Favourite Numbers. Authors: Oliver Keyes [aut, cre], Alex Bellos [cph].
- filematrix** File-Backed Matrix Class with Convenient Read and Write Access. Author: Andrey Shabalin.
- flacco** Feature-Based Landscape Analysis of Continuous and Constraint Optimization Problems. Authors: Pascal Kerschke [aut, cre], Jan Dagefoerde [aut].
- flexPM** Flexible Parametric Models for Censored and Truncated Data. Author: Paolo Frumento.
- flowDiv** Cytometric Diversity Indices from ‘FlowJo’ Workspaces. Authors: Bruno M.S. Wanderley, María Victoria Quiroga, André M. Amado, Fernando Unrein.
- flows** Flow Selection and Analysis. Authors: Timothée Giraud [cre, aut], Laurent Beauguitte [aut], Marianne Guérois [ctb].
- forestmodel** Forest Plots from Regression Models. Author: Nick Kennedy.
- fourPNO** Bayesian 4 Parameter Item Response Model. Author: Steven Andrew Culpepper [aut, cre].
- frailtySurv** General Semiparametric Shared Frailty Model. Authors: John V. Monaco [aut, cre], Malka Gorfine [aut], Li Hsu [aut].
- franc** Detect the Language of Text. Authors: Gabor Csardi, Titus Wormer, Maciej Ceglowski, Jacob R. Rideout, and Kent S. Johnson.
- freqdom** Frequency Domain Analysis for Multivariate Time Series. Authors: Hormann S., Kidzinski L.
- ftsspec** Spectral Density Estimation and Comparison for Functional Time Series. Author: Shahin Tavakoli [aut, cre].
- fulltext** Full Text of Scholarly Articles Across Many Data Sources. Author: Scott Chamberlain [aut, cre].
- functools** Functional Programming in R. Author: Paul Hendricks [aut, cre].

- funcy** Functional Clustering Algorithms. Authors: Christina Yassouridis [aut, cre], Dominik Ernst [ctb], Madison Giacomini [ctb], Sophie Lambert-Lacroix [ctb], Guillemette Marot [ctb], Franck Picard [ctb], Nicoleta Serban [ctb], Huijing Jiang [ctb], Gareth James [ctb], Catherine Sugar [ctb], Hans-Georg Mueller [ctb], Jie Peng [ctb], Chiou Jeng-Min [ctb], Pai-Ling Li [ctb].
- fungible** Fungible Coefficients and Monte Carlo Functions. Authors: Niels G. Waller and Jeff Jones.
- funr** Simple Utility Providing Terminal Access to all R Functions. Author: Sahil Seth [aut, cre].
- future** A Future API for R. Author: Henrik Bengtsson [aut, cre, cph]. In view: *HighPerformanceComputing*.
- gamsel** Fit Regularization Path for Generalized Additive Models. Authors: Alexandra Chouldechova and Trevor Hastie.
- gaston** Genetic Data Manipulation (Quality Control, GRM and LD Computations, PCA), Linear Mixed Models (AIREML Algorithm), Association Testing. Author: Hervé Perdry & Claire Dandine-Roulland.
- gdtools** Utilities for Graphical Rendering. Authors: David Gohel [aut, cre], Hadley Wickham [aut], Jeroen Ooms [ctb], Yixuan Qiu [ctb], RStudio [cph].
- gendist** Generated Probability Distribution Models. Author: Shaiful Anuar Abu Bakar.
- generator** Generate Data Containing Fake Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- geo** Draw and Annotate Maps, Especially Charts of the North Atlantic. Authors: Hoskuldur Bjornsson, Sigurdur Thor Jonsson, Arni Magnusson, and Bjarki Thor Elvarsson.
- geoknife** Web-Processing of Large Gridded Datasets. Authors: Jordan Read [aut, cre], Jordan Walker [aut], Alison Appling [aut], David Blodgett [aut], Emily Read [aut], Luke Winslow [aut].
- geosptdb** Spatio-Temporal; Inverse Distance Weighting and Radial Basis Functions with Distance-Based Regression. Authors: Carlos Melo, Oscar Melo.
- gesis** R Client for GESIS Data Catalogue (DBK). Author: Eric Persson [aut, cre].
- getMet** Get Meteorological Data for Hydrological Modeling. Authors: Andrew Sommerlot [aut, cre], Daniel Fuka [aut], Zachary Easton [aut].
- ggfortify** Data Visualization Tools for Statistical Analysis Results. Authors: Masaaki Horikoshi and Yuan Tang.
- ggplot2movies** Movies Data. Authors: Hadley Wickham [aut, cre], RStudio [cph].
- ggsn** North Symbols and Scale Bars for Maps Created with 'ggplot2' or 'ggmap'. Author: Oswaldo Santos Baquero [aut, cre].
- gimms** Download and Process GIMMS NDVI3g Data. Author: Florian Detsch.
- gitlabr** Access to the Gitlab API. Author: Jirka Lewandowski [aut, cre].
- gkmSVM** Gapped-Kmer Support Vector Machine. Author: Mahmoud Ghandi.
- glamlasso** Lasso Penalization in Large Scale Generalized Linear Array Models. Author: Adam Lund.
- glm.ddR** Distributed 'glm' for Big Data using 'ddR' API. Authors: Vishrut Gupta, Arash Fard.

- globals** Identify Global Objects in R Expressions. Author: Henrik Bengtsson [aut, cre, cph].
- glycanr** Tools for Analysing N-Glycan Data. Author: Ivo Ugrina [aut, cre].
- gmapsdistance** Distance and Travel Time Between Two Points from Google Maps. Author: Rodrigo Azuero Melo.
- gmum.r** GMUM Machine Learning Group Package. Authors: Wojciech Czarnecki, Stanislaw Jastrzebski, Marcin Data, Igor Sieradzki, Mateusz Bruno-Kaminski, Karol Jurek, Piotr Kowenzowski, Michal Pletty, Konrad Talik, Maciej Zgliczynski.
- gmwm** Generalized Method of Wavelet Moments. Authors: James Balamuta [aut, cph], Stephane Guerrier [ctb, cre, cph], Roberto Molinari [ctb, cph], Wenchao Yang [ctb].
- gofCopula** Goodness-of-Fit Tests for Copulae. Authors: Ostap Okhrin, Shulin Zhang, Qian M. Zhou, Simon Trimborn.
- googleAuthR** Easy Authentication with Google OAuth2 APIs. Author: Mark Edmondson [aut, cre].
- googlesheets** Manage Google Spreadsheets from R. Authors: Jennifer Bryan [aut, cre], Joanna Zhao [aut].
- gpuR** GPU Functions for R Objects. Author: Charles Determan Jr. In view: *HighPerformanceComputing*.
- gquad** G Quadruplex Motif Prediction Tool. Author: Hannah O. Ajoge.
- graticule** Meridional and Parallel Lines for Maps. Author: Michael D. Sumner [aut, cre].
- growthcurver** Simple Metrics to Summarize Growth Curves. Author: Kathleen sprouffske [aut, cre].
- grpregOverlap** Penalized Regression Models with Overlapping Grouped Covariates. Authors: Yaohui Zeng, Patrick Breheny.
- gtrendsR** R Functions to Perform and Display Google Trends Queries. Authors: Philippe Massicotte [aut, cre], Dirk Eddelbuettel [aut].
- gyriq** Kinship-Adjusted Survival SNP-Set Analysis. Authors: Martin Leclerc and Lajmi Lakhel Chaieb.
- hashids** Generate Short Unique YouTube-Like IDs (Hashes) from Integers. Authors: Alex Shum [aut, cre], Ivan Akimov [aut] (original author of hashids – implemented in javascript), David Aurelio [ctb] (implemented hashids in python 2 and 3).
- hashr** Hash R Objects to Integers Fast. Authors: Mark van der Loo [aut, cre], Paul Hsieh [ctb].
- hdnom** Nomograms for High-Dimensional Cox Models. Authors: Miaozhu Li, Nan Xiao.
- hierband** Convex Banding of the Covariance Matrix. Authors: Jacob Bien, Florentina Bunea, and Luo Xiao.
- highmean** Two-Sample Tests for High-Dimensional Mean Vectors. Authors: Lifeng Lin and Wei Pan.
- hindexcalculator** H-Index Calculator using Data from a Web of Science (WoS) Citation Report. Author: Sepand Alavifard [aut, cre].
- hit** Hierarchical Inference Testing. Author: Jonas Klasen [aut, cre].
- homomorphicR** Homomorphic Computations in R. Author: Balasubramanian Narasimhan [aut, cre].

- hotspot** Software Hotspot Analysis. Author: Csaba Farago.
- hqreg** Regularization Paths for Huber Loss Regression and Quantile Regression Penalized by Lasso or Elastic-Net. Author: Congrui Yi.
- httpcode** HTTP Status Code Helper. Author: Scott Chamberlain [aut, cre].
- humaniformat** A Parser for Human Names. Author: Oliver Keyes.
- iLaplace** Improved Laplace Approximation for Integrals of Unimodal Functions. Authors: Erlis Ruli [aut, cre], Nicola Sartori [aut], Laura Ventura [aut].
- iNEXT** Interpolation and Extrapolation for Species Diversity. Authors: T. C. Hsieh, K. H. Ma and Anne Chao.
- iaQCA** The Irvine Robustness Assessment for Qualitative Comparative Analysis. Authors: C. Ben Gibson [aut, cre], Burrell Vann Jr [aut].
- icsw** Inverse Compliance Score Weighting. Authors: Peter M. Aronow, Dean Eckles and Kyle Peyton.
- idendr0** Interactive Dendrograms. Author: Tomas Sieger.
- idm** Incremental Decomposition Methods. Authors: Alfonso Iodice D'Enza [aut], Angelos Markos [aut, cre], Davide Buttarazzi [ctb].
- ifaTools** Toolkit for Item Factor Analysis with OpenMx. Author: Joshua N. Pritikin [cre, aut].
- imPois** Imprecise Inferential Framework for Poisson Sampling Model. Authors: Chel Hee Lee [aut, cre, cph], Mikelis Bickis [aut, ths, cph].
- imager** Image Processing Library Based on CImg. Authors: Simon Barthelme [aut, cre], Antoine Cecchi [ctb].
- immer** Item Response Models for Multiple Ratings. Authors: Alexander Robitzsch [aut, cre], Jan Steinfeld [aut].
- imputeMissings** Impute Missing Values in a Predictive Context. Authors: Matthijs Meire, Michel Ballings, Dirk Van den Poel.
- imputeTS** Time Series Missing Value Imputation. Author: Steffen Moritz. In view: *Time-Series*.
- inbreedR** Analysing Inbreeding Based on Genetic Markers. Authors: Martin A. Stoffel [aut, cre], Mareike Esser [aut].
- inegiR** Integrate INEGI's (Mexican Stats Office) API with R. Author: Eduardo Flores.
- influenceR** Software Tools to Quantify Structural Importance of Nodes in a Network. Authors: Jacobs Simon [aut], Khanna Aditya [aut, cre], Madduri Kamesh [ctb], Bader David [ctb].
- injectoR** R Dependency Injection. Author: Lev Kuznetsov.
- instaR** Access to Instagram API via R. Authors: Pablo Barbera [aut, cre], Tiago Dantas [ctb], Jonne Guyt [ctb].
- interactionTest** Calculates Critical Test Statistics to Control False Discovery and Familywise Error Rates in Marginal Effects Plots. Authors: Justin Esarey and Jane Lawrence Sumner.
- interplot** Plot the Effects of Variables in Interaction Terms. Authors: Frederick Solt, Yue Hu.
- invLT** Inversion of Laplace-Transformed Functions. Author: Christopher Barry.

- ioncopy** Calling Copy Number Alterations in Amplicon Sequencing Data. Author: Jan Budczies.
- iotools** I/O Tools for Streaming. Authors: Simon Urbanek, Taylor Arnold.
- ipflasso** Integrative Lasso with Penalty Factors. Authors: Anne-Laure Boulesteix, Mathias Fuchs.
- iptools** Manipulate, Validate and Resolve IP Addresses. Authors: Bob Rudis [aut, cre], Oliver Keyes [aut].
- isoph** Isotonic Proportional Hazards Model. Authors: Yunro Chung [cre], Anastasia Ivanova, Michael G. Hudgens and Jason P. Fine.
- jetset** One-to-One Gene-Probeset Mapping for Affymetrix Human Microarrays. Authors: Qiyuan Li, Aron Eklund.
- jmotif** Tools for Time Series Analysis Based on Symbolic Aggregate Dcretization. Author: Pavel Senin [aut, cre]. In view: [TimeSeries](#).
- jrvFinance** Basic Finance; NPV/IRR/Annuities/Bond-Pricing; Black Scholes. Author: Jayanth Varma [aut, cre].
- jug** Create a Simple Web API for your R Functions. Author: Bart Smeets.
- jvnVaR** Value at Risk. Author: Hung Vu.
- kdecopula** Kernel Smoothing for Bivariate Copula Densities. Author: Thomas Nagler [aut, cre].
- kergp** Gaussian Process Laboratory. Authors: Yves Deville, David Ginsbourger, Olivier Roustant. Contributors: Nicolas Durrande.
- kernDeepStackNet** Kernel Deep Stacking Networks. Authors: Thomas Welchowski and Matthias Schmid.
- kerndwd** Distance Weighted Discrimination (DWD) and Kernel Methods. Authors: Boxiang Wang, Hui Zou.
- keyplayer** Locating Key Players in Social Networks. Author: Weihua An; Yu-Hsin Liu.
- keypress** Wait for a Key Press in a Terminal. Author: Gabor Csardi [aut, cre].
- kineticF** Framework for the Analysis of Kinetic Visual Field Data. Author: Dipesh E Patel & Mario Cortina-Borja.
- kmeans.ddR** Distributed k-Means for Big Data using 'ddR' API. Authors: Vishrut Gupta, Arash Fard.
- knitLatex** Knitr Helpers — Mostly Tables. Author: John Shea [aut, cre]. In view: [ReproducibleResearch](#).
- ksrlive** Identify Kinase Substrate Relationships Using Dynamic Data. Author: Westa Domanova.
- kwb.hantush** Calculation of Groundwater Mounding Beneath an Infiltration Basin. Author: Michael Rustler.
- labelrank** Predicting Rankings of Labels. Authors: Artur Aiguzhinov [cre], Carlos Soares [aut].
- landest** Landmark Estimation of Survival and Treatment Effect. Author: Layla Parast.
- landsat8** Landsat 8 Imagery Rescaled to Reflectance, Radiance and/or Temperature. Author: Alexandre dos Santos.

- lasvmR** A Simple Wrapper for the LASVM Solver. Author: Aydin Demircioglu.
- latex2exp** Use L^AT_EX Expressions in Plots. Author: Stefano Meschiari [aut, cre]. In view: *ReproducibleResearch*.
- lcopula** Liouville Copulas. Authors: Leo Belzile [aut, cre], Christian Genest [aut, ctb], Alexander J. McNeil [ctb], Johanna G. Neslehova [ctb].
- ldamatch** Multivariate Condition Matching by Backwards Elimination Using Linear Discriminant Analysis. Authors: Kyle Gorman [aut, cre], Geza Kiss [ctb].
- ldatuning** Tuning of the LDA Models Parameters. Author: Murzintcev Nikita [aut, cre].
- leaflet** Create Interactive Web Maps with the JavaScript ‘Leaflet’ Library. Authors: Joe Cheng [aut, cre], Yihui Xie [aut], Hadley Wickham [ctb], jQuery Foundation and contributors [ctb, cph] (jQuery library), Vladimir Agafonkin [ctb, cph] (Leaflet library), CloudMade [cph] (Leaflet library), Leaflet contributors [ctb] (Leaflet library), Leaflet Providers contributors [ctb, cph] (Leaflet Providers plugin), RStudio [cph].
- learnNN** Examples of Neural Networks. Author: Bastiaan Quast [aut, cre].
- lfda** Local Fisher Discriminant Analysis. Author: Yuan Tang with great contributions from Zachary Deane-Mayer.
- lift** Compute the Top Decile Lift and Plot the Lift Curve. Authors: Steven Hoornaert, Michel Ballings, Dirk Van den Poel.
- liftr** Dockerize R Markdown Documents. Authors: Miao Zhu Li [ctb], Tengfei Yin [ctb], Nan Xiao [aut, cre].
- likelihoodAsy** Functions for Likelihood Asymptotics. Authors: Ruggero Bellio and Donald Pierce.
- lira** Linear Regression in Astronomy. Author: Mauro Sereno.
- listWithDefaults** List with Defaults. Author: Russell S. Pierce.
- littler** R at the Command-Line via ‘r’. Author: Dirk Eddelbuettel.
- logisticPCA** Binary Dimensionality Reduction. Author: Andrew J. Landgraf.
- longurl** Expand Short URLs Using the ‘LongURL’ API. Author: Bob Rudis [aut, cre].
- loo** Efficient Leave-One-Out Cross-Validation and WAIC for Bayesian Models. Authors: Aki Vehtari [aut], Andrew Gelman [aut], Jonah Gabry [cre, aut], Juho Piironen [ctb], Ben Goodrich [ctb].
- lookupTable** Look-Up Tables using S4. Authors: Enzo Jia [aut, cre], Marc Maier [aut].
- lpbrim** LP-BRIM Bipartite Modularity. Authors: Timothee Poisot, Daniel B Stouffer.
- lqr** Robust Linear Quantile Regression. Authors: Christian E. Galarza, Luis Benites, Victor H. Lachos.
- lrgs** Linear Regression by Gibbs Sampling. Author: Adam Mantz.
- lsei** Solving Least Squares Problems under Equality/Inequality Constraints. Authors: Yong Wang [aut, cre], Charles L. Lawson [aut], Richard J. Hanson [aut].
- lsl** Latent Structure Learning. Author: Po-Hsien Huang [aut, cre].
- lucr** Currency Formatting and Conversion. Author: Oliver Keyes.
- lulcc** Land Use Change Modelling in R. Author: Simon Moulds.
- luzlogr** Lightweight Logging for R Scripts. Author: Ben Bond-Lamberty [aut, cre].

- mHG** Minimum-Hypergeometric Test. Author: Kobi Perl.
- maGUI** A Graphical User Interface for Microarray Data Analysis. Authors: Dhammapal Bharne, Praveen Kant, Vaibhav Vindal.
- magclass** Data Class and Tools for Handling Spatial-Temporal Data. Authors: Jan Philipp Dietrich, Benjamin Bodirsky, Misko Stevanovic, Lavinia Baumstark, Christoph Bertram, Markus Bonsch, Anastasis Giannousakis, Florian Humpenoeder, David Klein, Ina Neher, Michaja Pehl, Anselm Schultes.
- marketeR** Enhanced Analytics for Marketers Navigating the Ocean of Web Data. Author: Felix Mikaelian.
- markophylo** Markov Chain Models for Phylogenetic Trees. Authors: Utkarsh J. Dang and G. Brian Golding. In view: *Phylogenetics*.
- matlabr** An Interface for MATLAB using System Calls. Author: John Muschelli.
- matlib** Matrix Functions for Teaching and Learning Linear Algebra and Multivariate Statistics. Authors: Michael Friendly [aut, cre], John Fox [ctb], Georges Monette [ctb].
- mcemGLM** Maximum Likelihood Estimation for Generalized Linear Mixed Models. Author: Felipe Acosta Archila.
- merTools** Tools for Analyzing Mixed Effect Regression Models. Authors: Jared E. Knowles [aut, cre], Carl Frederick [aut].
- meta4diag** Meta-Analysis for Diagnostic Test Studies. Authors: Jingyi Guo and Andrea Riebler. In view: *MetaAnalysis*.
- metaSEM** Meta-Analysis using Structural Equation Modeling. Author: Mike W.-L. Cheung. In view: *MetaAnalysis*.
- metafuse** Fused Lasso Approach in Regression Coefficient Clustering. Authors: Lu Tang, Peter X.K. Song.
- metansue** Meta-Analysis of Studies with Non Statistically-Significant Unreported Effects. Author: Joaquim Radua.
- meteR** Fitting and Plotting Tools for the Maximum Entropy Theory of Ecology (METE). Authors: Andy Rominger, Cory Merow.
- meteo** Spatio-Temporal Analysis and Mapping of Meteorological Observations. Authors: Milan Kilibarda, Aleksandar Sekulic, Tomislav Hengl, Edzer Pebesma, Benedikt Graeler.
- metricsgraphics** Create Interactive Charts with the JavaScript 'MetricsGraphics' Library. Authors: Bob Rudis [aut, cre], Ali Almossawi [ctb, cph] (MetricsGraphics library), Hamilton Ulmer [ctb, cph] (MetricsGraphics library), Mozilla [cph] (MetricsGraphics library), jQuery Foundation and contributors [ctb, cph] (jQuery library).
- mev** Multivariate Extreme Value Distributions. Author: Leo Belzile [aut, cre].
- mgm** Estimating Mixed Graphical Models. Author: Jonas Haslbeck.
- mhde** Minimum Hellinger Distance Test for Normality. Authors: Paul W. Eslinger [aut, cre], Heather Orr [aut, ctb].
- midrangeMCP** Multiples Comparisons Procedures Based on Studentized Midrange and Range Distributions. Authors: Ben Deivide [cre], Daniel Furtado [aut].
- missDeaths** Correctly Analyse Disease Recurrence with Missing at Risk Information using Population Mortality. Authors: Tomaz Stupnik [aut, cre], Maja Pohar Perme [aut].

- mixtox** Curve Fitting and Mixture Toxicity Assessment. Author: Xiangwei Zhu.
- mlVAR** Multi-Level Vector Autoregression. Authors: Sacha Epskamp, Marie K. Deserno and Laura F. Bringmann. In view: *TimeSeries*.
- mlr.datasets** R Ultimate Multilabel Dataset Repository. Authors: David Charle [cre], Francisco Charle [aut].
- mlma** Multilevel Mediation Analysis. Authors: Qingzhao Yu, Bin Li.
- mlsjunkgen** Use the MLS Junk Generator Algorithm to Generate a Stream of Pseudo-Random Numbers. Author: Steve Myles [aut, cre].
- mmc** Multivariate Measurement Error Correction. Author: Jaejoon Song.
- mmfta** Model-Based Clustering and Classification with Mixtures of Modified t Factor Analyzers. Authors: Jeffrey L. Andrews, Paul D. McNicholas, and Mathieu Chalifour.
- modQR** Multiple-Output Directional Quantile Regression. Authors: Miroslav Šiman [aut], Pavel Boček [aut, cre].
- modelObj** A Model Object Framework for Regression Analysis. Author: Shannon T. Holway.
- mogavs** Multiobjective Genetic Algorithm for Variable Selection in Regression. Authors: Tommi Pajala [aut, cre], Pekka Malo [aut], Ankur Sinha [aut], Timo Kuosmanen [ctb].
- molaR** Dental Surface Complexity Measurement Tools. Authors: James D. Pampush [aut, cre, cph], Julia M. Winchester [aut, cph], Paul E. Morse [aut, cph], Alexander Q. Vining [aut, cph].
- momr** Mining Metaomics Data (MetaOMineR). Authors: Edi Prifti, Emmanuelle Le Châtelier.
- monogeneaGM** Geometric Morphometric Analysis of Monogenean Anchors. Author: Tsung Fei Khang.
- monographaR** Taxonomic Monographs Tools. Author: Marcelo Reginato.
- moveHMM** Animal Movement Modelling using Hidden Markov Models. Authors: Theo Michelot, Roland Langrock, Toby Patterson, Eric Rexstad. In view: *SpatioTemporal*.
- mplot** Graphical Model Stability and Variable Selection Procedures. Authors: Garth Tarr [aut, cre], Samuel Mueller [aut], Alan Welsh [aut].
- mri** Modified Rand Index (1 and 2.1 and 2.2) and Modified Adjusted Rand Index (1 and 2.1 and 2.2). Author: Marjan Cugmas.
- ms.sev** Package for Calculation of ARMSS, Local MSSS and Global MSSS. Authors: Helga Westerlind, Ali Manouchehrinia.
- multiwave** Estimation of Multivariate Long-Memory Models Parameters. Authors: Sophie Achard [aut, cre], Irene Gannaz [aut].
- mvQuad** Methods for Multivariate Quadrature. Author: Constantin Weiser (HHU of Duesseldorf / Germany). In view: *NumericalMathematics*.
- mvtboost** Tree Boosting for Multivariate Outcomes. Author: Patrick Miller [aut, cre].
- nbconvertR** Vignette Engine Wrapping IPython Notebooks. Author: Philipp Angerer.
- nhanesA** NHANES Data Retrieval. Author: Christopher Endres.
- nivm** Noninferiority Tests with Variable Margins. Author: Michael P. Fay.

- nlnet** Nonlinear Network Reconstruction and Clustering Based on DCOL (Distance Based on Conditional Ordered List). Authors: Haodong Liu, Tianwei Yu.
- nlrr** Non-Linear Relative Risk Estimation and Plotting. Author: Yiqiang Zhan [aut, cre].
- nomclust** Hierarchical Nominal Clustering Package. Authors: Sulc Zdenek, Rezankova Hana.
- nparACT** Non-Parametric Measures of Actigraphy Data. Author: Christine Blume Nayan-tara Santhi Manuel Schabus.
- npregfast** Nonparametric Estimation of Regression Models with Factor-by-Curve Interactions. Authors: Marta Sestelo [aut, cre], Nora M. Villanueva [aut], Javier Roca-Pardinas [aut].
- npsf** Nonparametric and Stochastic Efficiency and Productivity Analysis. Authors: Oleg Badunenko [aut, cre], Yaryna Kolomiytseva [aut], Pavlo Mozharovskyi [aut].
- npsurv** Non-Parametric Survival Analysis. Author: Yong Wang.
- oaColors** OpenAnalytics Colors Package. Author: Jason Waddell.
- oaPlots** OpenAnalytics Plots Package. Authors: Jason Waddell, Willem Ligtenberg.
- oai** General Purpose ‘Oai-PMH’ Services Client. Author: Scott Chamberlain [aut, cre].
- oapackage** Orthogonal Array Package. Author: Pieter Thijs Eendebak. In view: *ExperimentalDesign*.
- odds.converter** Betting Odds Conversion. Author: Marco Blume.
- oglmx** Estimation of Ordered Generalized Linear Models. Author: Nathan Carroll.
- olctools** Open Location Code Handling in R. Author: Oliver Keyes.
- onewaytests** One-Way Independent Groups Design. Authors: Osman Dag, Anil Dolgun, N. Meric Konar.
- optCluster** Determine Optimal Clustering Algorithm and Number of Clusters. Authors: Michael Sekula, Somnath Datta, and Susmita Datta.
- optigrab** Command-Line Parsing for an R World. Author: Christopher Brown.
- optimixture** Optimal Mixture Weights in Multiple Importance Sampling. Authors: Hera Y. He, Art B. Owen.
- ordinalNet** Penalized Ordinal Regression. Author: Mike Wurm [aut, cre].
- osrm** Interface Between R and the OpenStreetMap-Based Routing Service OSRM. Author: Timothée Giraud [cre, aut].
- pAnalysis** Benchmarking and Rescaling R2 using Noise Percentile Analysis. Authors: Joseph G Kreke, Sangeet Khemlani, Greg Trafton.
- packagetrackr** Track R Package Downloads from RStudio’s CRAN Mirror. Author: Jirka Lewandowski.
- packcircles** Circle Packing. Authors: Michael Bedward [aut, cre], David Eppstein [aut] (Original author of Python code for graph-based circle packing ported to C++ for this package).
- paco** Procrustes Application to Cophylogenetic Analysis. Authors: Juan Antonio Balbuena, Timothee Poisot, Matthew Hutchinson, Fernando Cagua.
- pageviews** An API Client for Wikimedia Traffic Data. Author: Oliver Keyes.

- palettetown** Use Pokemon Inspired Colour Palettes. Author: Tim Lucas.
- palr** Colour Palettes for Data. Author: Michael D. Sumner [aut, cre].
- pangae** Client for the 'Pangaea' Database. Authors: Scott Chamberlain [aut, cre], Kara Woo [aut], Andrew MacDonald [aut], Naupaka Zimmerman [aut], Gavin Simpson [aut].
- parallelML** A Parallel-Voting Algorithm for many Classifiers. Author: Wannes Rosiers (InfoFarm).
- params** Simplify Parameters. Authors: Sahil Seth [aut, cre], Yihui Xie [ctb] (kable from knitr R/table.R).
- parsec** Partial Orders in Socio-Economics. Authors: Alberto Arcagni [aut, cre], Marco Fattore [ctb].
- patPRO** Visualizing Temporal Microbiome Data. Authors: Hannigan GD, Loesche MA, Hodkinson BP, Mehta S, Grice EA.
- pbdZMQ** Programming with Big Data – Interface to ZeroMQ. Authors: Wei-Chen Chen [aut, cre], Drew Schmidt [aut], Whit Armstrong [ctb] (some functions are modified from the rzmq for backward compatibility), Brian Ripley [ctb] (C code of shellexec), R Core team [ctb] (some functions are modified from the R source code).
- pcadapt** Principal Component Analysis for Outlier Detection. Authors: Keurcien Luu, Michael G.B. Blum.
- pch** Piecewise Constant Hazards Models for Censored and Truncated Data. Author: Paolo Frumento.
- pco** Panel Cointegration Tests. Author: Georgi Marinov.
- personograph** Pictographic Representation of Treatment Effects. Authors: Joel Kuiper [aut, cre], Iain Marshall [aut].
- phonenumber** Convert Letters to Numbers and Back as on a Telephone Keypad. Author: Steve Myles [aut, cre].
- phyext2** An Extension (for Package 'SigTree') of Some of the Classes in Package 'phylobase'. Author: J. Conrad Stack.
- phylogenetics** Estimating Statistical Errors of Phylogenetic Metrics. Authors: Xia Hua, Lindell Bromham.
- phylosignal** Exploring the Phylogenetic Signal in Continuous Traits. Author: Francois Keck.
- phyndr** Matches Tip and Trait Data. Authors: Rich FitzJohn, Matt Pennell and Will Cornwell.
- pid** Process Improvement using Data. Author: Kevin Dunn [aut, cre].
- piecewiseSEM** Piecewise Structural Equation Modeling. Author: Jon Lefcheck.
- pinnacle.API** A Wrapper for the Pinnacle Sports API. Authors: Marco Blume, Nicholas Jhirad, Amine Gassem.
- pixiedust** Tables so Beautifully Fine-Tuned You Will Believe It's Magic. Author: Benjamin Nutter [aut, cre].
- pkgconfig** Private Configuration for R Packages. Author: Gabor Csardi.
- pla** Parallel Line Assays. Author: Jens Henrik Badsberg.

- plfMA** A GUI to View, Design and Export Various Graphs of Data. Authors: Dhammapal Bharne, Vaibhav Vindal.
- plotly** Create Interactive Web Graphics via Plotly's JavaScript Graphing Library. Authors: Carson Sievert [aut, cre], Chris Parmer [aut, cph], Toby Hocking [aut], Scott Chamberlain [aut], Karthik Ram [aut], Marianne Corvellec [aut], Pedro Despouy [aut].
- pnea** Parametric Network Enrichment Analysis. Authors: Mirko Signorelli, Veronica Vinciotti and Ernst C. Wit.
- pnf** Prime Numbers and Integer Factorization. Author: Abby Rothway.
- poisson** Simulating Homogenous & Non-Homogenous Poisson Processes. Authors: Kristian Brock [aut], Daniel Slade [ctb].
- polyfreqs** Bayesian Population Genomics in Autopolyploids. Author: Paul Blischak [aut, cre].
- popEpi** Functions for Epidemiological Analysis using Population Data. Authors: J Miettinen, M Rantanen, K Seppa, J Pitkaniemi.
- popprxl** Read GenALEx Files Directly from Excel. Author: Zhian N. Kamvar [cre, aut].
- praise** Praise Users. Authors: Gabor Csardi, Sindre Sorhus.
- prclust** Penalized Regression-Based Clustering Method. Authors: Chong Wu, Wei Pan.
- prepdatt** Preparing Experimental Data for Statistical Analysis. Authors: Ayala S. Allon [aut, cre], Roy Luria [aut], Jim Grange [ctb], Nachshon Meiran [ctb].
- preprocomb** Tools for Preprocessing Combinations. Author: Markus Vattulainen.
- prettymapr** Scale Bar, North Arrow, and Pretty Margins in R. Author: Dewey Dunnington.
- primes** Generate and Test for Prime Numbers. Author: Oliver Keyes.
- prism** Access Data from the Oregon State Prism Climate Project. Authors: Hart Edmund [aut, cre], Kendon Bell [aut].
- pro** Point-Process Response Model for Optogenetics. Authors: Xi (Rossi) LUO with contributions from Dylan Small and Vikaas Sohal.
- proflr** Quickly Profile Data in R. Author: Paul Hendricks [aut, cre].
- progenyClust** Finding the Optimal Cluster Number Using Progeny Clustering. Author: C.W. Hu.
- prop.comb.RR** Analyzing Combination of Proportions and Relative Risk. Authors: Maria Alvarez and Javier Roca-Pardinas.
- proton** The Proton Game. Authors: Przemysław Biecek [aut, cre], Witold Chodor [trl], Foundation SmarterPoland.pl [cph].
- prozor** Minimal Protein Set Explaining Peptide Spectrum Matches. Author: Witold Wolski.
- pscore** Standardizing Physiological Composite Risk Endpoints. Author: Joshua F. Wiley.
- ptycho** Bayesian Variable Selection with Hierarchical Priors. Authors: Laurel Stell and Chiara Sabatti.
- purge** Purge Training Data from Models. Authors: Marc Maier [cre], Chaoqun Jia [ctb], MassMutual Advanced Analytics [aut].
- purrr** Functional Programming Tools. Authors: Hadley Wickham [aut, cre], Lionel Henry [ctb], RStudio [cph].

- pweight** P-Value Weighting. Authors: Edgar Dobriban [aut, cre], Kristen Fortney [aut].
- pwrRasch** Statistical Power Simulation for Testing the Rasch Model. Authors: Takuya Yanagida [cre, aut], Jan Steinfeld [aut], Thomas Kiefer [ctb]. In view: *Psychometrics*.
- pystr** Python String Methods in R. Author: Nicole White.
- qap** Heuristics for the Quadratic Assignment Problem (QAP). Authors: Michael Hahsler [aut, cre, cph], Franz Rendl [ctb, cph]. In view: *Optimization*.
- qlcData** Processing Data for Quantitative Language Comparison (QLC). Author: Michael Cyosuw.
- qlcVisualize** Visualization for Quantitative Language Comparison (QLC). Author: Michael Cysouw.
- qrage** Tools that Create D3 JavaScript Force Directed Graph from R. Authors: Shingo Yamamoto [aut, cre], RStudio, Inc. [cph], Michael Bostock [ctb, cph] (D3.js library), jQuery Foundation [cph] (jQuery library and jQuery UI library), jQuery contributors [ctb, cph] (jQuery library), jQuery UI contributors [ctb, cph] (jQuery UI library).
- qrcode** QRcode Generator for R. Author: Victor Teh.
- qrjoint** Joint Estimation in Linear Quantile Regression. Author: Surya Tokdar.
- qtlcharts** Interactive Graphics for QTL Experiments. Authors: Karl W Broman [aut, cre], Michael Bostock [ctb, cph] (d3.js library in `htmlwidgets/lib`), Justin Palmer [ctb, cph] (`d3.tip` library in `htmlwidgets/lib`), Cynthia Brewer [cph] (ColorBrewer library in `htmlwidgets/lib`), Mark Harrower [cph] (ColorBrewer library in `htmlwidgets/lib`), The Pennsylvania State University [cph] (ColorBrewer library in `htmlwidgets/lib`), jQuery Foundation [cph] (jQuery library in `htmlwidgets/lib`), jQuery contributors [ctb] (jQuery library in `htmlwidgets/lib`), jQuery UI contributors [ctb] (jQuery UI library in `htmlwidgets/lib`).
- qualvar** Implements Indices of Qualitative Variation Proposed by Wilcox (1973). Author: Joel Gombin.
- quantable** Streamline Descriptive Analysis of Quantitative Data Matrices. Author: Witold Wolski.
- quantileDA** Quantile Classifier. Authors: Christian Hennig, Cinzia Viroli.
- quickmapr** Quickly Map and Explore Spatial Data. Author: Jeffrey W. Hollister [aut, cre].
- qut** Quantile Universal Threshold. Authors: Jairo Diaz, Sylvain Sardy, Caroline Giacobino, Nick Hengartner.
- rAmCharts** JavaScript Charts API Tool. Authors: Jeffery Petit [aut, cre], Antanas Marcellionis [aut, cph] ('AmCharts' library in the directory `htmlwidgets/lib/amcharts`), Benoit Thieurmél [aut, ctb], DataKnowledge [ctb] (See official web site at <http://www.datak.fr>).
- rGroovy** Groovy Language Integration. Author: Thomas P. Fuller.
- rPowerSampleSize** Sample Size Computations Controlling the Type-II Generalized Family-Wise Error Rate. Authors: Pierre Lafaye de Micheaux, Benoit Liqueur and Jeremie Riou.
- radiomics** Radiomic Image Processing Toolbox. Author: Joel Carlson.
- rafalib** Convenience Functions for Routine Data Exploration. Authors: Rafael A. Irizarry and Michael I. Love.

- randomForest.ddR** Distributed ‘randomForest’ for Big Data using ‘ddR’ API. Authors: Vishrut Gupta, Arash Fard, Winston Li, Matthew Saltz.
- randomizeR** Randomization for Clinical Trials. Authors: Thi Mui Pham [ctb], David Schindler [aut], Diane Uschner [aut, cre].
- ranger** A Fast Implementation of Random Forests. Author: Marvin N. Wright. In view: *MachineLearning*.
- rase** Range Ancestral State Estimation for Phylogeography and Comparative Analyses. Authors: Ignacio Quintero [aut, cre], Forrest W. Crawford [aut], Petr Keil [aut].
- rcanvec** Access and Plot CanVec and CanVec+ Data for Rapid Basemap Creation in Canada. Author: Dewey Dunnington.
- rchess** Chess Move, Generation/Validation, Piece Placement/Movement, and Check/Checkmate/Stalemate Detection. Author: Joshua Kunst.
- rcrypt** Symmetric File Encryption Using GPG. Author: Brett Klamer [aut, cre].
- rddtools** Toolbox for Regression Discontinuity Design (‘RDD’). Authors: Matthieu Stigler [aut], Bastiaan Quast [aut, cre].
- reReg** Recurrent Event Regression. Author: Sy Han (Steven) Chiou.
- recoder** A Simple and Flexible Recoder. Author: Ali Sanaei.
- reda** Recurrent Event Data Analysis. Authors: Wenjie Wang [aut, cre], Haoda Fu [aut], Jun Yan [ctb].
- refund.shiny** Interactive Plotting for Functional Data Analyses. Authors: Julia Wrobel [aut, cre], Jeff Goldsmith [aut].
- relen** Compute Relative Entropy. Author: Soeren Braehmer.
- repjson** Tools for Handling EpiJSON (Epidemiology Data) Files. Authors: Andy South [aut, cre], Thomas Finnie [aut], Ellie Sherrard-Smith [aut], Ana Bento [aut], Thibaut Jombart [aut].
- repo** A Resource Manager for R Objects. Author: Francesco Napolitano.
- reservoir** Tools for Analysis, Design, and Operation of Water Supply Storages. Authors: Sean Turner [aut, cre], Stefano Galelli [aut].
- resumer** Build Resumes with R. Author: Jared Lander [aut, cre]. In view: *ReproducibleResearch*.
- geolocate** IP Address Geolocation. Authors: Oliver Keyes [aut, cre], Drew Schmidt [aut], David Robinson [ctb], Maxmind, Inc. [cph], Pascal Gloor [cph].
- rglwidget** ‘rgl’ in ‘htmlwidgets’ Framework. Author: Duncan Murdoch.
- rhandsontable** Interface to the ‘Handsontable.js’ Library. Authors: Jonathan Owen [aut, cre, cph], Jeff Allen [ctb], Yihui Xie [ctb], Enzo Martoglio [ctb], Warpechowski Marcin [ctb, cph] (Handsontable.js library), Handsontable sp. z o.o. [ctb, cph] (Handsontable.js library), Aisch Gregor [ctb, cph] (Chroma.js library), Wood Tim [ctb, cph] (Moment.js library), Chernev Iskren [ctb, cph] (Moment.js library), Moment.js contributors [ctb, cph] (Moment.js library), Bushell David [ctb, cph] (Pikaday.js library), jQuery Foundation [ctb, cph] (jQuery.js library), Splunk Inc [ctb, cph] (Sparkline.js library).
- ridigbio** Interface to the iDigBio Data API. Authors: Francois Michonneau [aut, cph], Matthew Collins [aut, cre], Scott Chamberlain [ctb].
- riskR** Risk Management. Author: Marcelo Brutti Righi.

- rleafmap** Interactive Maps with R and Leaflet. Author: Francois Keck.
- rnetcarto** Fast Network Modularity and Roles Computation by Simulated Annealing (Rgraph C Library Wrapper for R). Authors: Guilhem Doulier [aut, cre] (R bindings, current implementation of the simulated annealing algorithm), Roger Guimera [ctb] (Author of the original rgraph library), Daniel B. Stouffer [aut, ths].
- rnn** Recurrent Neural Network. Author: Bastiaan Quast [aut, cre].
- rollply** Moving-Window Add-on for 'plyr'. Author: Alexandre Genin.
- rosm** Plot Raster Map Tiles from Open Street Map and Other Sources. Authors: Dewey Dunnington [aut, cre], Timothée Giraud [ctb].
- rotl** Interface to the 'Open Tree of Life' API. Authors: Francois Michonneau [aut, cre], Joseph Brown [aut], David Winter [aut].
- rpca** RobustPCA: Decompose a Matrix into Low-Rank and Sparse Components. Author: Maciek Sykulski [aut, cre].
- rpdo** Pacific Decadal Oscillation Index. Authors: Joe Thorley [aut, cre], Nathan Mantua [aut, dtc], Steven R. Hare [aut, dtc].
- rpivotTable** Build Powerful Pivot Tables and Dynamically Slice & Dice your Data. Authors: Enzo Martoglio [aut, cre] (R interface), Nicolas kruchten [ctb, cph] (pivottable library).
- rpnf** Point and Figure Package. Author: Sascha Herrmann.
- rrepast** Invoke 'Repast Symphony' Simulation Models. Authors: Antonio Prestes Garcia [aut, cre], Alfonso Rodriguez-Paton [aut, ths].
- rscopus** Scopus Database API Interface. Author: John Muschelli.
- rsggm** Robust Sparse Gaussian Graphical Modeling via the Gamma-Divergence. Author: Kei Hirose.
- rstan** R Interface to Stan. Authors: Jiqiang Guo [aut], Daniel Lee [ctb], Krzysztof Sakrejda [ctb], Jonah Gabry [aut], Ben Goodrich [cre, aut], Joel de Guzman [cph] (Boost), Eric Niebler [cph] (Boost), Thomas Heller [cph] (Boost), John Fletcher [cph] (Boost). In view: *Bayesian*.
- rstatscn** R Interface for China National Data. Author: Xuehui YANG.
- rstpm2** Flexible Link-Based Survival Models. Authors: Mark Clements [aut, cre], Xing-Rong Liu [aut], Paul Lambert [ctb].
- rsvd** Randomized Singular Value Decomposition. Author: N. Benjamin Erichson [aut, cre].
- rtimes** Client for New York Times APIs. Author: Scott Chamberlain [aut, cre].
- rtkore** STK++ Core Library Integration to R using Rcpp. Authors: Serge Iovleff [aut, cre], Parmeet Bhatia [ctb].
- rtson** Typed JSON. Author: Alexandre Maurel.
- runittestthat** Convert 'RUnit' Test Functions into 'testthat' Tests. Author: Richard Cotton [aut, cre].
- rusda** Interface to USDA Databases. Author: Franz-Sebastian Krah.
- rwirelesscom** Basic Wireless Communications Simulation. Author: Alberto Gutierrez [aut, cre].
- rwunderground** R Interface to Weather Underground API. Author: Alex Shum.

- sSDR** Tools Developed for Structured Sufficient Dimension Reduction (sSDR). Authors: Yang Liu, Francesca Chiaromonte, Bing Li.
- sValues** Measures of the Sturdiness of Regression Coefficients. Author: Carlos Cinelli.
- satellite** Various Functions for Handling and Manipulating Remote Sensing Data. Authors: Thomas Nauss, Hanna Meyer, Florian Detsch, Tim Appelhans.
- sbmSDP** Semidefinite Programming for Fitting Block Models of Equal Block Sizes. Author: Arash A. Amini.
- scatterD3** D3 JavaScript Scatterplot from R. Author: Julien Barnier [aut, cre].
- schumaker** Schumaker Shape-Preserving Spline. Authors: Stuart Baumann [aut, cre], Margaryta Klymak[ctb].
- scmamp** Statistical Comparison of Multiple Algorithms in Multiple Problems. Authors: Borja Calvo [aut, cre], Guzman Santafe [aut].
- score** A Package to Score Behavioral Questionnaires. Author: Jaejoon Song.
- scorer** Quickly Score Models. Author: Paul Hendricks [aut, cre].
- sdPrior** Scale-Dependent Hyperpriors in Structured Additive Distributional Regression. Author: Nadja Klein.
- searchConsoleR** Google Search Console APIv3 R Client. Authors: Mark Edmondson [aut, cre], Jennifer Bryan [ctb].
- seeclickfixr** Access Data from the SeeClickFix Web API. Authors: Justin de Benedictis-Kessner [aut, cre], Christian Lemp [ctb].
- seismic** Predict Information Cascade by Self-Exciting Point Process. Authors: Hera He, Murat Erdogan, Qingyuan Zhao.
- sejmRP** An Information About Deputies and Votings in Polish Diet. Authors: Piotr Smuda [aut, cre], Przemyslaw Biecek [aut], Tomasz Mikolajczyk [ctb].
- selectiveInference** Tools for Selective Inference. Authors: Ryan Tibshirani, Rob Tibshirani, Jonathan Taylor, Joshua Loftus, Stephen Reid.
- sgRSEA** Enrichment Analysis of CRISPR/Cas9 Knockout Screen Data. Authors: Jungsik Noh, Beibei Chen.
- shinystan** Interactive Visual and Numerical Diagnostics and Posterior Analysis for Bayesian Models. Authors: Jonah Gabry [aut, cre], Stan Development Team [ctb], Michael Andreae [ctb], Michael Betancourt [ctb], Bob Carpenter [ctb], Yuanjun Gao [ctb], Andrew Gelman [ctb], Ben Goodrich [ctb], Daniel Lee [ctb], Dongying Song [ctb], Rob Trangucci [ctb].
- signalHsmm** Predict Presence of Signal Peptides. Authors: Michal Burdukiewicz [cre, aut], Piotr Sobczyk [aut].
- simest** Constrained Single Index Model Estimation. Authors: Arun Kumar Kuchibhotla, Rohit Kumar Patra.
- simmer** Just Let it Simmer. Authors: Bart Smeets [aut], Iñaki Ucar [aut, cre].
- simmr** A Stable Isotope Mixing Model. Author: Andrew Parnell.
- simplr** Basic Symbolic Expression Simplification. Authors: Oliver Flasch [aut, cre], Felix Gorschluter [aut], Leo Liberti [ctb].
- simr** Power Analysis for Generalised Linear Mixed Models by Simulation. Authors: Peter Green, Catriona MacLeod.

- sinaplot** An Enhanced Chart for Simple and Truthful Representation of Single Observations over Multiple Classes. Authors: Nikos Sidiropoulos [aut, cre], Sina Hadi Sohi [aut], Nicolas Rapin [aut], Frederik Otzen Bagger [aut].
- sisal** Sequential Input Selection Algorithm. Author: Mikko Korpela [aut, cre].
- smallarea** Fits a Fay Herriot Model. Author: Abhishek Nandy.
- smernc** Statistical Methods for Regional Counts. Author: Joshua French.
- smint** Smooth Multivariate Interpolation for Gridded and Scattered Data. Authors: Yves Deville Yann Richet. Fortran codes by William Thacker, Manjula Iyer Jingwei Zhang, Laynet Watson, Jeffrey Birch, Manjula Iyer, Michael Berry and Robert Renka. Fortran codes by Alain Hebert.
- snn** Stabilized Nearest Neighbor Classifier. Authors: Wei Sun, Xingye Qiao, and Guang Cheng.
- sodavis** SODA: Main and Interaction Effects Selection for Discriminant Analysis and Logistic Regression. Authors: Yang Li, Jun S. Liu.
- sodium** A Modern and Easy-to-Use Crypto Library. Author: Jeroen Ooms.
- solidearthtide** Solid Earth Tide Computation. Authors: Jose Gama [aut, cre], Dennis Milbert [aut, cph].
- spTDyn** Spatially Varying and Spatio-Temporal Dynamic Linear Models. Authors: K. Shuvo Bakar, Philip Kokic, Huidong Jin.
- spanel** Spatial Panel Data Models. Author: Taha Zaghdoudi.
- sparsereg** Sparse Bayesian Models for Regression, Subgroup Analysis, and Panel Data. Authors: Marc Ratkovic and Dustin Tingley.
- spatialfil** Application of 2D Convolution Kernel Filters to Matrices or 3D Arrays. Authors: Nicola Dinapoli, Roberto Gatta.
- spduration** Split-Population Duration (Cure) Regression. Authors: Andreas Beger [aut, cre], Daina Chiba [aut], Daniel Hill [aut], Nils Metternich [aut], Shahryar Minhas [aut], Michael Ward [cph].
- speciesgeocodeR** Prepare Species Distributions for the Use in Phylogenetic Analyses. Author: Alexander Zizka [aut, cre].
- specmine** Metabolomics and Spectral Data Analysis and Mining. Authors: Christopher Costa, Marcelo Maraschin, Miguel Rocha.
- spectrino** Spectra Visualization, Organizer and Data Preparation. Author: Teodor Krastev.
- spinyReg** Sparse Generative Model and Its EM Algorithm. Authors: Charles Bouveyron, Julien Chiquet, Pierre Latouche, Pierre-Alexandre Mattei.
- spm12r** Wrapper Functions for SPM (Statistical Parametric Mapping) Version 12 from the Wellcome Trust Centre for Neuroimaging. Author: John Muschelli.
- spoccutils** Utilities for Use with ‘spocc’. Author: Scott Chamberlain [aut, cre].
- spsann** Optimization of Sample Configurations using Spatial Simulated Annealing. Authors: Alessandro Samuel-Rosa [aut, cre], Lucia Helena Cunha dos Anjos [ths], Gustavo de Mattos Vasques [ths], Gerard B M Heuvelink [ths], Edzer Pebesma [ctb], Jon Skoien [ctb], Joshua French [ctb], Pierre Roudier [ctb], Dick Brus [ctb], Murray Lark [ctb].

- spsi** Shape-Preserving Uni-Variate and Bi-Variate Spline Interpolation. Authors: Szymon Sacher & Andrew Clausen. Excerpts adapted from Fortran code Copyright (C) Paolo Costantini.
- sscor** Robust Correlation Estimation and Testing Based on Spatial Signs. Authors: Alexander Duerre [aut, cre], Daniel Vogel [aut].
- starma** Modelling Space Time AutoRegressive Moving Average (STARMA) Processes. Author: Felix Cheysson.
- stationaRy** Get Hourly Meteorological Data from Global Stations. Author: Richard Iannone [aut, cre].
- statnetWeb** A Graphical User Interface for Network Modeling with ‘Statnet’. Authors: Emily Beylerian [cre, aut], Kirk Li [ctb], Samuel Jenness [ctb], Martina Morris [ctb].
- steadyICA** ICA and Tests of Independence via Multivariate Distance Covariance. Authors: Benjamin B. Risk and Nicholas A. James and David S. Matteson.
- stmBrowser** Structural Topic Model Browser. Authors: Michael K. Freeman, Jason Chuang, Margaret E. Roberts, Brandon M. Stewart and Dustin Tingley.
- stplanr** Sustainable Transport Planning. Authors: Robin Lovelace [aut, cre], Richard Ellison [aut] (Author of various functions), Barry Rowlingson [aut] (Author of overline), Nick Bearman [aut] (Co-author of gclip).
- stringgaussnet** PPI and Gaussian Network Construction from Transcriptomic Analysis Results Integrating a Multilevel Factor. Authors: Emmanuel Chaplais, Henri-Jean Garchon.
- subscore** SubScore Computing Functions in Classical Test Theory. Authors: Shenghai Dai [aut, cre], Xiaolin Wang [aut], Dubravka Svetina [aut].
- subspace** Interface to OpenSubspace. Authors: Marwan Hassani [aut, cre], Matthias Hansen [aut], Emmanuel Müller [ctb], Ira Assent [ctb], Stephan Günnemann [ctb], Timm Jansen [ctb], Thomas Seidl [ctb], University of Waikato [ctb, cph].
- surveyeditor** Generate a Survey that can be Completed by Survey Respondents. Author: Char Leung.
- surveyplanning** Survey Planning Tools. Authors: Juris Breidaks [aut, cre], Martins Liberts [aut], Janis Jukams [aut].
- svgPanZoom** R ‘Htmlwidget’ to Add Pan and Zoom to Almost any R Graphic. Authors: Anders Riutta et. al. [aut, cph] (svg-pan-zoom.js BSD-licensed library in htmlwidgets/lib), Jorik Tangelder [aut, cph] (hammer.js MIT-licensed touch library in htmlwidgets/lib), Kent Russell [aut, cre] (R interface to svg-pan-zoom.js).
- svs** Tools for Semantic Vector Spaces. Author: Koen Plevoets [aut, cre].
- swirlify** A Toolbox for Writing ‘swirl’ Courses. Authors: Sean Kross [aut, cre], Nick Carchedi [aut], Chih-Cheng Liang [ctb], Wush Wu [ctb].
- switchr** Installing, Managing, and Switching Between Distinct Sets of Installed Packages. Author: Gabriel Becker [aut, cre].
- switchrGist** Publish Package Manifests to GitHub Gists. Author: Gabriel Becker [aut, cre].
- taber** Split and Recombine Your Data. Author: Seth Wenchel [aut, cre, cph].
- tablaxlsx** Write Formatted Tables in Excel Workbooks. Author: Jesus Maria Rodriguez Rodriguez.

- tailloss** Estimate the Probability in the Upper Tail of the Aggregate Loss Distribution. Authors: Isabella Gollini [aut, cre], Jonathan Rougier [ctb].
- textreuse** Detect Text Reuse and Document Similarity. Author: Lincoln Mullen [aut, cre]. In view: *NaturalLanguageProcessing*.
- tgcd** Thermoluminescence Glow Curve Deconvolution. Authors: Jun Peng [aut, cre], Jorge More [ctb], Burton Garbow [ctb], Kenneth Hillstrom [ctb], John Burkardt [ctb], Linda R. Petzold [ctb], Alan C. Hindmarsh [ctb], R. Woodrow Setzer [ctb].
- tg1m** Binary Regressions under Independent Student-t Priors. Author: Yingbo Li.
- threewords** Represent Precise Coordinates in Three Words. Author: Oliver Keyes.
- tigris** Load Census TIGER/Line Shapefiles into R. Authors: Kyle Walker [aut, cre], Bob Rudis [ctb].
- timedelay** Time Delay Estimation for Stochastic Time Series of Gravitationally Lensed Quasars. Authors: Hyungsuk Tak, Kaisey Mandel, David A. van Dyk, Vinay L. Kashyap, Xiao-Li Meng, and Aneta Siemiginowska.
- titanic** Titanic Passenger Survival Data Set. Author: Paul Hendricks [aut, cre].
- tmlenet** Targeted Maximum Likelihood Estimation for Network Data. Authors: Oleg Sofrygin [aut, cre], Mark J. van der Laan [aut].
- tmod** Transcriptional Module Analysis. Author: January Weiner.
- tmvnsim** Truncated Multivariate Normal Simulation. Author: Samsiddhi Bhattacharjee.
- tnam** Temporal Network Autocorrelation Models (TNAM). Authors: Philip Leifeld [aut, cre], Skyler J. Cranmer [ctb].
- tolBasis** Fundamental Definitions and Utilities of the Time Oriented Language (TOL). Author: Pedro Gea.
- tracheideR** Standardize Tracheidograms. Author: Filipe Campelo.
- traits** Species Trait Data from Around the Web. Authors: Scott Chamberlain [aut, cre], Zachary Foster [aut], Ignasi Bartomeus [aut], David LeBauer [aut], David Harris [aut].
- transcribeR** Automated Transcription of Audio Files Through the HP IDOL API. Authors: Christopher Lucas, Dean Knox, Dustin Tingley, Thomas Scanlan, Shiv Sunil, Michael May, Angela Su.
- translateSPSS2R** Toolset for Translating SPSS-Syntax to R-Code. Authors: Andreas Wygrabek [aut, cre], Bastian Wiessner [aut], eoda GmbH [cph].
- translation.ko** R Manuals Literally Translated in Korean. Authors: Chel Hee Lee [aut, cre], Edward Kang [ctb], Sunyoung Kim [ctb], Heather Kim [ctb].
- treescape** Statistical Exploration of Landscapes of Phylogenetic Trees. Authors: Thibaut Jombart [aut], Michelle Kendall [aut, cre], Jacob Almagro-Garcia [aut], Caroline Colijn [aut].
- trib** Analysing and Visualizing Tribology Measurements. Authors: Gokce Mehmet Ay [aut, cre], Osman Nuri Celik [ths].
- trimr** An Implementation of Common Response Time Trimming Methods. Author: James Grange [aut, cre].
- tsPI** Improved Prediction Intervals for ARIMA Processes and Structural Time Series. Author: Jouni Helske. In view: *TimeSeries*.

- tseriesEntropy** Entropy Based Analysis and Tests for Time Series. Author: Simone Giannerini. In view: *TimeSeries*.
- tsna** Tools for Temporal Social Network Analysis. Authors: Skye Bender-deMoll [aut, cre], Martina Morris [aut], James Moody [ctb].
- tuber** Client for the YouTube API. Author: Gaurav Sood [aut, cre].
- tumgr** Tumor Growth Rate Analysis. Author: Julia Wilkerson.
- tweet2r** Twitter Collector and Export to 'postGIS'. Author: Pau Aragó.
- ukgasapi** API for UK Gas Market Information. Author: Timothy Wong [aut, cre].
- umx** Helper Functions for Structural Equation Modelling in OpenMx. Author: Timothy C Bates [aut, cre].
- unfoldr** Stereological Unfolding for Spheroidal Particles. Authors: Markus Baaske [aut, cre], Felix Ballani [ctb].
- uniqueAtomMat** Finding Unique or Duplicated Rows or Columns for Atomic Matrices. Author: Long Qu [aut, cre].
- unitedR** Assessment and Evaluation of Formations in United. Author: David Schindler [aut, cre].
- uptimeRobot** Access the UptimeRobot Ping API. Author: Gabriele Baldassarre [aut, cre].
- urlshorteneR** R Wrapper for the Bit.ly, Goo.gl and Is.gd URL Shortening Services. Author: John Malc.
- validate** Data Validation Infrastructure. Authors: Mark van der Loo [cre, aut], Edwin de Jonge [aut], Paul Hsieh [ctb].
- valottery** Results from the Virginia Lottery Draw Games. Author: Clay Ford [cre, aut].
- varhandle** Functions for Robust Variable Handling. Author: Mehrad Mahmoudian [aut, cre].
- varian** Variability Analysis in R. Authors: Joshua F. Wiley [aut, cre], Elkhart Group Limited [cph].
- versions** Query and Install Specific Versions of Packages on CRAN. Author: Nick Golding.
- vertexenum** Vertex Enumeration of Polytopes. Author: Robert Robere.
- vipor** Plot Categorical Data Using Quasirandom Noise and Density Estimates. Authors: Scott Sherrill-Mix, Erik Clarke.
- viridis** Matplotlib Default Color Map. Authors: Simon Garnier [aut, cre], Noam Ross [ctb, cph] (Continuous scale), Bob Rudis [ctb, cph] (Combined scales).
- viridisLite** Default Color Maps from 'matplotlib' (Lite Version). Authors: Simon Garnier [aut, cre], Noam Ross [ctb, cph], Bob Rudis [ctb, cph].
- visNetwork** Network Visualization using 'vis.js' Library. Authors: Almende B.V. [aut, cph] (vis.js library in htmlwidgets/lib), Benoit Thieurmél [aut, cre] (R interface).
- vtreat** Simple Variable Treatment. Authors: John Mount, Nina Zumel.
- wBoot** wBootstrap Routines. Author: Neil A. Weiss.
- wPerm** Permutation Tests. Author: Neil A. Weiss.
- walkr** Random Walks in the Intersection of Hyperplanes and the N-Simplex. Authors: Andy Yao, David Kane.

- warbleR** Streamline Bioacoustic Analysis. Authors: Marcelo Araya-Salas, Grace Smith Vidaurre, Hua Zhong.
- water** Actual Evapotranspiration with Energy Balance Models. Authors: Guillermo Federico Olmedo [aut, cre], Samuel Ortega-Farias [aut], David Fonseca-Luengo [aut], Daniel de la Fuente-Saiz [aut], Fernando Fuentes Peñailillo [aut].
- wbsts** Multiple Change-Point Detection for Nonstationary Time Series. Authors: Karolos Korkas and Piotr Fryzlewicz. In view: *TimeSeries*.
- weatherr** Tools for Handling and Scrapping Instant Weather Forecast Feeds. Author: Stan Yip [aut, cre].
- webreadr** Tools for Reading Formatted Access Log Files. Author: Oliver Keyes.
- webuse** Import Stata 'webuse' Datasets. Author: Thomas J. Leeper [aut, cre].
- wec** Weighted Effect Coding. Authors: Rense Nieuwenhuis, Manfred te Grotenhuis, Ben Pelzer, Alexanter Schmidt, Ruben Konig, Rob Eisinga.
- weightTAPSPACK** Weight TAPS Data. Authors: David G. Carlson, Michelle Torres, and Taeyong Park.
- wellknown** Convert Between 'WKT' and 'GeoJSON'. Author: Scott Chamberlain [aut, cre].
- whoami** Username, Full Name, Email Address, 'GitHub' Username of the Current User. Author: Gabor Csardi.
- whoapi** A 'Whoapi' API Client. Author: Oliver Keyes.
- wingui** Advanced Windows Functions. Author: Andrew Redd.
- wiod** World Input Output Database 1995–2011. Author: Bastiaan Quast [aut, cre].
- withr** Run Code With Temporarily Modified Global State. Authors: Jim Hester [aut, cre], Kirill Müller [aut], Hadley Wickham [aut], Winston Chang [aut], RStudio [cph].
- woe** Computes Weight of Evidence and Information Values. Author: Sudarson Mothilal Thoppay.
- wordbankr** Accessing the Wordbank Database. Authors: Mika Braginsky [aut, cre], Daniel Yurovsky [ctb], Michael Frank [ctb].
- wpp2015** World Population Prospects 2015. Authors: Population Division, Department of Economic and Social Affairs, United Nations.
- wqs** Weighted Quantile Sum Regression. Authors: Jenna Czarnota, David Wheeler.
- xergm.common** Common Infrastructure for Extensions of Exponential Random Graph Models. Author: Philip Leifeld [aut, cre].
- xmeta** A Toolbox for Multivariate Meta-Analysis. Authors: Yong Chen, Chuan Hong, Haitao Chu. In view: *MetaAnalysis*.
- xseq** Assessing Functional Impact on Gene Expression of Mutations in Cancer. Authors: Jiarui Ding, Sohrab Shah.
- yakmoR** A Simple Wrapper for the k-Means Library Yakmo. Author: Aydin Demircioglu.
- yummlyr** R Bindings for Yummly API. Author: Roman Tsegelskyi.
- zetadiv** Functions to Compute Compositional Turnover Using Zeta Diversity. Authors: Guillaume Latombe, Melodie A. McGeoch, Cang Hui.

Other changes

The following packages were moved to the Archive: [ABCExtremes](#), [ABCp2](#), [AOfamilies](#), [BHMSMAfMRI](#), [Biograph](#), [Brq](#), [CALINE3](#), [CARramps](#), [CLAG](#), [COP](#), [CSS](#), [Clad-dis](#), [DBFTest](#), [DPw](#), [EMJumpDiffusion](#), [ETAS](#), [FluOMatic](#), [GPlab](#), [HWxtest](#), [LGS](#), [LVQ-Tools](#), [MADAM](#), [MFDA](#), [MGL](#), [MMIX](#), [McParre](#), [Multiclasstesting](#), [OPE](#), [PBC](#), [PER-regress](#), [PF](#), [PIGShift](#), [PKfit](#), [RHive](#), [RMediation](#), [RcmdrPlugin.StatisticalURV](#), [Rhh](#), [SASxport](#), [SE.IGE](#), [SINGLE](#), [SNPMClust](#), [SPMS](#), [Watersheds](#), [WaveCD](#), [WideLM](#), [YourCast](#), [ZeligGAM](#), [ascrda](#), [bayesclust](#), [bdoc](#), [bear](#), [bigrf](#), [biopara](#), [branchLars](#), [clustergas](#), [cmprskQR](#), [cobs99](#), [correlate](#), [datalist](#), [db.r](#), [diskmemoiser](#), [emdatr](#), [epi2loc](#), [esotericR](#), [evora](#), [fuzzyMM](#), [gbs](#), [glassomix](#), [gooJSON](#), [gstudio](#), [h1r](#), [iFes](#), [indicoio](#), [ivivc](#), [Immfit](#), [loe](#), [magma](#), [mixlow](#), [netweavers](#), [ngramr](#), [nlADG](#), [pcrcoal](#), [permGPU](#), [permtest](#), [phom](#), [phyloTop](#), [phylosim](#), [polytomous](#), [predfinitepop](#), [pt](#), [qlspack](#), [qualityTools](#), [rJavax](#), [radiant](#), [rawFasta](#), [reccsim](#), [repra](#), [rgauges](#), [ringbuffer](#), [ringscale](#), [rlme](#), [rpud](#), [rrules](#), [rspear](#), [signal.hsmm](#), [spca](#), [sqlshare](#), [sse](#), [stab](#), [tdm](#), [tslars](#), [varSelectIP](#), [vectoptim](#), [waterfall](#), [weightedKmeans](#), [wombsoft](#).

The following packages were resurrected from the Archive: [AdapEnetClass](#), [BAS](#), [Barnard](#), [DESP](#), [MPCI](#), [MetaPath](#), [NHMSAR](#), [OneArmPhaseTwoStudy](#), [RAHRS](#), [RBerkeley](#), [REGENT](#), [RPPanalyzer](#), [RSpincalc](#), [Rcell](#), [RcmdrPlugin.Export](#), [Rgbr](#), [Rgnuplot](#), [Rlof](#), [SigTree](#), [ThreeGroups](#), [anoint](#), [cems](#), [cgwtools](#), [colorscience](#), [conicfit](#), [cpm](#), [cusp](#), [delt](#), [dprep](#), [dynpred](#), [edesign](#), [edmr](#), [flowr](#), [geofd](#), [googlePublicData](#), [highriskzone](#), [htmltab](#), [imputeYn](#), [ipw](#), [jackknifeKME](#), [locfdr](#), [muRL](#), [munsellinterpol](#), [nordklimdata1](#), [ocomposition](#), [papeR](#), [parfm](#), [pgnorm](#), [pmc](#), [rbiouml](#), [rknn](#), [samplesize](#), [skellam](#), [spectral.methods](#), [toaster](#), [wccsom](#), [wikipediatrend](#), [xgboost](#), [xml2](#).

Kurt Hornik

WU Wirtschaftsuniversität Wien, Austria

Kurt.Hornik@R-project.org

Achim Zeileis

Universität Innsbruck, Austria

Achim.Zeileis@R-project.org