CalibratedSimulationFunctions

calibratedSimulationFunctions.R

DesignTable : function (DataList, methods, MC_replicates = 100, columnames = NULL, filename = NULL, DoHistograms = F)
ExpectedRegret : function (wavesizes, C, theta, methods, R)
PrintRegretHistogram : function (shareTreatmentsList, filename, dataname, MC_replicates, waves)
PrintRegretTable : function (RegretTable, filename, caption, MC_replicates, nmethods)
SimulateTWaveDesign : function (wavesizes, C, theta, method = "modifiedthompson")

ReadData.R

DataToTheta : function (filename, dataname, k, strataVars, outcomename, treatmentname, covariatesnames, printFigures = FALSE)
print_one_datafigure : function (DataList)
PrintDataFigures : function (stratasizes, sumstats, theta, filename, dataname, outcomename, treatmentname, k)
ReadAllData : function (printFigures = F)

IllustrationFunctions

Illustration_NonConvexity_Functions.R

MSEcalc : function (theta, N)
powerCalc : function (theta, N)
stylizedDesign : function (A, B, C, N)

OptimalAssignmentFunctions

SimulatedWelfareFunctions.R

Seed : function (A, B, Nmax)
simplex : function (N, k, coverage = "full", RR = 500, thetahat = NULL)
simulatedSample : function (D, theta)
Uhat : function (A, B, C, n, Vfunction = SWF)

TreatmentAssignmentFunctions.R

Dtchoice : function (A, B, C, Nt, method = "optimal")
EqualAssignment : function (N, k)
GivenAssignment : function (n, k)
ProportionalAssignment : function (Shares, Nt)
Thompson : function (A, B, Nt)
ThompsonProbabilities : function (A, B, RR = 1000)

WelfareFunctions.R

betabinomial : function (n, s, a, b)
betaposterior : function (D, Y)
PolicyChoice : function (A, B, C)
Regret : function (D, Y, C, theta)
SWF : function (A, B, C)
U : function (A, B, C, n, Vfunction = SWF)
UoverSimplex : function (A, B, C, N, Ufunction = U, coverage = "full")
V : function (A, B, C, NN)

welfareplotsGraphics.R

OptimalPilot : function (A, B, C, M, parallel = TRUE)
PlotOptimalAssignment : function (n1, N2, k = 3)
PlotSimplex : function (A, B, C, N)
PlotSimplexAlternative : function (A, B, C, N)
SimplexPanel : function (N, alternativeplot = FALSE)
ThompsonMappingPlots : function (p_list)

ThompsonHierarchicalFunctions

calibratedSimulationFunctionsCovariates.R

DesignTableCovariates : function (DataList, methods, MC_replicates = 100, columnames = NULL, filename = NULL)
ExpectedRegretCovariates : function (wavesizes, C, theta, PX, methods, R)
SimulateTWaveDesignCovariates : function (wavesizes, C, theta, PX, method = "stratified")
SimulateX : function (PX, N)
SimulateY : function (theta, D, X)

functionlist.Rmd

MCMC_HierarchicalThompson.R

draw.alpha : function (alpha, beta, theta, prop.sd, nx)
draw.beta : function (alpha, beta, theta, prop.sd, nx)
draw.thetas : function (alpha, beta, NNd, SSd, nx)
DtchoiceCovariates : function (Y, D, X, k, nx, Xt, method = "stratified")
DtchoiceMCMCProbabilities : function (Y, D, X, k, nx, C = rep(0, k), RR = 2000)
DtchoiceThompsonHierarchical : function (Y, D, X, k, nx, Xt)
DtchoiceThompsonHierarchicalExpected : function (Y, D, X, k, nx, Xt)
DtchoiceThompsonHierarchicalModified : function (Y, D, X, k, nx, Xt)
hierarchicalPosteriorMean : function (Y, D, X, k, nx)
log.prior : function (alpha, beta)
ProportionalAssignment : function (Shares, nt)
sample.theta.d : function (NNd, SSd, nx, RR = 2000)
StratifiedAssignment : function (X, k, nx)

ThompsonHierarchical_old.R

betabinomialMLE : function (NN, SS)
DtchoiceCovariates : function (Y, D, X, k, nx, Xt, method = “stratified”)
DtchoiceThompson : function (Y, D, k, Nt)
DtchoiceThompsonHierarchical : function (Y, D, X, k, nx, Xt)
DtchoiceThompsonHierarchicalAlternating : function (Y, D, X, k, nx, Xt)
DtchoiceThompsonHierarchicalModified : function (Y, D, X, k, nx, Xt, RR)
DtchoiceThompsonModified : function (Y, D, k, Nt, RR)
hierarchicalPosteriorDraw : function (NN, SS, LLH, AB = NULL)
hierarchicalPosteriorMean : function (Y, D, X, empiricalBayes = T, draws = 1000)
SimulateX : function (PX, N)
SimulateY : function (theta, D, X)
StratifiedAssignment : function (X, k, nx)