Appendix -- Code

1 JSD

dist.JSD(inMatrix, pseudocount, …)

2

2.1 performance

performance(allSig ,rt, rt.day)

CalculateNumbers(allSig, rt, rt.day)

2.2 PCA of performance

PCAperf(inPerf, fact, rotate)

3

3.1 top10 => top5 +rolling

rollingTop(X-log, X_lin, on, start)

3.2 Portfolio optimization

3.2.1 Portfolio weights

3.2.1.1 Set portfolio functions

portfolioGMVP(Sigma)

portfolioMarkowitiz(mu Sigma, lmd)

portfollioMaxSharpeRatio(mu, Sigma)

portfolioDR(X, lmd, alpha)

portfolioCVaR(X, lmd, alpha)

portfolioMaxDD(X, c)

portfolioAveDD(X, c)

portfolioCDaR(X, c, alpha)

portfolioV(Sigma, mu)

3.2.1.2 Calculate weights for all kinds of portfolio

CalculateWeight1(strategies_log_roll)

CalculateWeight2(X_log_trn)

3.2.2 weekly, monthly, 1\2\3 weekly rolling

3.2.2.1 weekly and monthly rolling

rollingWM(X_log, X_lin, on, start)

3.2.2.2 endpoingts are 1\2\3 week's Friday rooling

rollingFri(X_log, X_lin, week, start)

3.4 Calculate rank

CalculateRank(perf)

3.4.1 Rolling1

WeightUnif(strategies_log_roll)

rollingUnif(X_log, X_lin, allSig, rt, start)

- **Indices**

Indices(return)

- **Shoushu 手数**
  - **Based on Strategy**

shoushuStra(x, monthPrice)

  - **Based on Contract**

shoushuStraC(x, monthPrice, numT)