Nonlinear Discriminant Functions for Mixed Random Walk Models

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Abstract:

A procedure is presented for finding maximum likelihood estimates of the parameters of a mixture of two random walk distributions in two cases, using classified and unclassified observations. Based on small sample size, estimation of nonlinear discriminant functions is considered. Throughout simulation experiments, the performance of the corresponding estimated nonlinear discriminant functions is investigated. The total probabilities of misclassification and percentage biases are evaluated and discussed.

Keywords:

Discriminant functions, Monte Carlo study, Random walk distribution

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