Computational Issues in Nonlinear Optimization for Robust Estimation and Outlier Detection Using a Multivariate Minimum Distance Criterion

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A minimum distance criterion is automatically robust when fitting a parametric model. Such an approach may be used to identify multivariate outliers and to fit multivariate parameters, including regression.

However, if a minimum distance criterion is chosen that is not dimensionless, then care must be exercised in scaling the criterion to be used in the nonlinear optimization code. In this paper, we illustrate the algorithms and describe how dimension limits the application.

Subtitle

Figure or Table Title

REFERENCES

RÉSUMÉ

Nous etudions un critère pour l'estimation des fonctions de densité et régression. Ils sont robuste. Quelques examples sont presenté.