Einladung zum Biometrischen Kolloquium

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ROBUST LINEAR AND LOGISTIC REGRESSION IN HIGH DIMENSION

18. Juni 2018, 15h s.t.

Seminarraum (88.03.513) des Zentrum für Medizinische Statistik, Informatik und Intelligente Systeme (CeMSIIS) der Medizinischen Universität Wien Spitalgasse 23, 1090 Wien
https://cemsiis.meduniwien.ac.at/allgemeines/anschrift/

ABSTRACT:

Fully robust versions of the elastic net estimator are introduced for linear and logistic regression. The algorithms to compute the estimators are based on the idea of repeatedly applying the non-robust classical estimators to data subsets only. It is shown how outlier-free subsets can be identified efficiently, and how appropriate tuning parameters for the elastic net penalties can be selected. A final reweighting step improves the efficiency of the estimators. Simulation studies compare with non-robust and other competing robust estimators and reveal the superiority of the newly proposed methods. This is also supported by a reasonable computation time and by good performance in real data examples.

This is joint work with
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