Rfit: An R Package for Rank Estimates

John Kloke

In the nineteen seventies, Jureckova and Jaeckel proposed rank estimation for linear models. Since that time, several authors have developed inference and diagnostic methods for these estimators. These estimators and their associated inference are robust to outliers in response space. The methods include estimation of standard errors, tests of general linear hypotheses, confidence intervals, studentized residuals, and measures of influential cases. Unfortunately, these methods are not implemented in main stream software, and hence are not widely used. For this presentation I will highlight the main features of an R package I am developing which implements these methods. The package uses standard linear models syntax and includes many of the main inference and diagnostics functions (e.g. `anova`, `summary`, `rstudent`, `influence.measures`).