

Regularized least-square optimization method for variable selection in regression models

MARKO DIMOVSKI, IRENA STOJKOVSKA

*Faculty of Natural Sciences and Mathematics
Ss. Cyril and Methodius University of Skopje, Macedonia
mdimovski16@gmail.com, irenatra@pmf.ukim.mk*

A new type of regularization in least-square optimization for variable selection in regression models is proposed. Proposed regularization is suitable for regression models with equal regressors' influence. Consistency of the estimator of the regression parameter under suitable assumptions is shown. Numerical results demonstrate efficiency of the proposed regularization and its better performance compared to existing regularizations.