

Solving non-convex lasso type problems with DC programming

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We propose a novel algorithm for addressing variable selection (or sparsity recovering) problem using non-convex penalties. A generic framework based on a DC programming is presented and yields to an iterative weighted lasso-type problem. We have then showed that many existing approaches for solving such a non-convex problem are particular cases of our algorithm. We also provide some empirical evidence that our algorithm outperforms existing ones.

The talk is partially based on the paper:

<http://asi.insa-rouen.fr/enseignants/~arakotom/publi/concaveLasso.pdf>