Variable selection and estimation using the group lasso

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1 Abstract

2 Introduction

Structured sparsity regularization refers to a class of statistical techniques that extend the sparsity-based regularization methods such as the Lasso[1]. Whereas regularization techniques such as the Ridge [2] seek to minimize the *insert formula*, which shrinks the coefficients corresponding to *TIKONOV INSERT*, the Lasso induces sparsity in the coefficient vector, setting the de-selected coefficients to exactly 0. This has various advantages such as model interpretability, computational efficiency and reduction of dimentionality.

The group lasso was first introduced in 2006 [3] as a technique to select groups of predictors.

3 Group Lasso

4 Experiments

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6 Discussion

7 Conclusion

References

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