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Fused-Lasso Optimization and it's Application to Radar Sensor Calibration.

We derive an optimization algorithm for the fused-Lasso (L1 + TV) minimization problem. The fused-Lasso penalty was proposed as a generalization of the Lasso that is designed for learning classifiers of datasets that exhibit a natural ordering of their features. Our framework leverages tools that have been developed for non-smooth gauge minimization problems, and proposes efficient projectors onto the fused-Lasso penalty. We also present an application of fused-Lasso optimization in the context of blind calibration of sensors in distributed radar imaging. (Received January 07, 2019)