



## An application of a robust regression method based on Gaussian kernel function

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The use of robust regression methods occurs in practical situations due to the presence of outliers. This paper proposes a robust regression method that re-weighted the outliers observations considering the Gaussian kernel function (KRR). The parameter estimate algorithm presents a low computational cost and the convergence is guaranteed. An application with a real data set have showed the usefulness of the KRR method in comparison with some classical robust approaches (WLS, M-Estimator, MM-Estimator, L1 regression) and the OLS method.

**Keywords:** Kernel, Robust Methods, Regression Models, Outlier.