



## ESTIMATION OF LEAST ABSOLUTE DEVIATION METHODS FOR LINEAR AND NONLINEAR REGRESSION MODELS

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### ABSTRACT

*In linear regression analysis a method to obtain valued inferences is the least square approach non linear regression analysis is currently the most fertile are of research in the model theory mathematical science it is a powerful techniques for analysis data describe by models which are non linear in parameter both linear and non linear regression analysis has been developed in all its details universally used. The assumption of normality of the random variables in made in this analysis. A few non normal variables can be transformed into normal using certain transformation technique. In many situation the distribution is highly skewed such as lognormal, pareto etc. And the use of linear and non linear regression analysis leads to highly results. The Least Absolute Deviation (LAD) regression is a field of great interest in regression analysis the application of this method is available in the recent literature covering various aspects of modeling, computational efficiency, error analysis, gross error identification etc. In the case of intrinsically linear models, the ordinary least square (OLS) estimation can be applied to the transformed models and the optimal estimators can be obtain for the parameters. In this case, the OLS estimation can be applied under iterative procedure for estimating parameters of the nonlinear models. In this paper its proposed to compare the LAD estimation method versus linear and nonlinear regression models.*

**Key words:** *Least Absolute Deviation (LAD) Method of Estimation, Linear and Nonlinear Regression Models, Iterative Regression Least Square.*