

Abstract

Missing value is a common problem in statistical analysis. The existence of missing value could diminish some necessary and usefull data information. One of the ways in handling missing value is filling the missing data with the plausible value predicted from the available information in data. This method is called imputation method. One of the imputation methods that being analysed in this final paper is *Local Least Squares Imputation* method (LLSI). LLSI is a neighbour-based imputation method which imputes the missing data through the information gotten from its nearest neighbour. In this final paper, LLSI is implemented and tested to impute several percentage of missing value. The performance of imputation method is measured by *Normalized Root Mean Squared Error* parameter (NRMSE).

The impact of data imputation to *Classification* process is also analysed. The performance parameter for this process are *Precision*, *Recall* and *F-Measure*. Refers to the result of the experiment, LLSI is proved as a robust imputation method for handling missing value.

Keywords: imputation method, *Local Least Squares Imputation* (LLSI), missing value