

Missing Data Analysis

High-Dimensional Imputation

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2020-12-04

The sources listed below represent an overview of the work on high-dimensional missing data imputation. This list is certainly not exhaustive—and may not be especially representative—but it should provide a good starting point for readers interested in learning about the current state-of-the-art in missing data imputation for high-dimensional problems.

Although most of these sources discuss/evaluate several different imputation methods, I have attempted to classify each paper by its primary focus.

Overviews/Comparisons

- Drechsler, J., & Reiter, J. P. (2011). An empirical evaluation of easily implemented, nonparametric methods for generating synthetic datasets. *Computational Statistics and Data Analysis*, 55(12), 3232–3243. doi: 10.1016/j.csda.2011.06.006
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Single Imputation using Classification/Regression Trees

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Single Imputation using K-Nearest Neighbors

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- de Andrade Silva, J., & Hruschka, E. R. (2013). An experimental study on the use of nearest neighbor-based imputation algorithms for classification tasks. *Data & Knowledge Engineering*, 84, 47–58. doi: 10.1016/j.datak.2012.12.006
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Single Imputation using Artificial Neural Networks

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Multiple Imputation

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