

## **Optimization Algorithms to Solve Feature Selection Problem: A Review**

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Feature Selection (FS) method is one of the most important data pre-processing steps in data mining domain, it is used to find the essential features subset in order to make a new subset of informative features. The model that used the informative subset such that a classification model built only with this subset would get better predictive accuracy than the model that used a complete set of features. In this paper, we provide a summary of almost all of the methods present in the literature of 2018. The goal is to provide a general presentation to variant optimization algorithms that can be applied to a wide array of machine learning problems. We converge on Filter, Wrapper and Embedded methods. Finally, we analyzed the results of several feature selection techniques on standard datasets to illustrate the applicability of feature selection techniques.

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