Process Mapping

BigDataStack Software Component developed by UPRC

Process Mapping targets the problem of identifying or recommending the best algorithm from a set of candidate algorithms, given a specific data analysis task, in an automatic way. Its role is to automatically map a step of a process to a specific algorithmic instance from a given pool of algorithms, thereby achieving “process mapping”.

**Input**

**Output**

A specific machine learning (ML) algorithm with a set of values for input variables that are automatically mapped to the process (e.g., k-means with number of clusters set to two (2)).

**Initial TRL**
TRL 0

**Final TRL**
TRL 5

**End Users**

Any organization, company, institution or individual that uses machine learning.
Key Features and Benefits

• Automatic algorithm selection for ML tasks,
• Hyper Parameter Tuning,
• The component follows a meta learning approach, thus it improves its performance as it is applied on more and more datasets algorithm for an ML task

Essential Information for Users

The component will automatically select an algorithm from a pre-specified set of algorithms along with a set of values for input parameters.

Standards involved in the development of the component

Not applicable

Implementation in BigDataStack Use Cases

The application dimensioning workbench is primarily related to the generic data services offered by the project.
How can the BigDataStack component contribute to Standardization foundations or initiatives?
Not Expected

Differentiators from competitors in the market
Focus on unsupervised learning.