
Algorithm primitives

MASTER THESIS

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Abstract

To improve existing automated picking of a machine learning algorithm

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1 Introduction

This report is the result of my graduation project which completes my Business Information Systems study at Eindhoven University of Technology. The project was performed internally at the University in the Data mining department. In this project we investigated annotations of primitives, more specifically primitives in the scikit-learn library. In the section 1.1 we will briefly explain more about primitives and the annotations. To elaborate on this we will outline the research questions and thesis structure

1.1 problem description

Machine learning is a growing field that can help process the increase of available data[4][3].

1.2 research question

We base our research question on the work of Joaquin to give properties to algorithms. More specifically we look more closely to the resilience properties.

1.3 thesis structure

1.4 Outline

2 Preliminaries

Before we discuss in detail the solutions for the steps of our approach, this chapter provides some background knowledge and definitions which are required for a good understanding of the remainder of this thesis.

2.1 Sklearn/scikit-learn library

2.2 Terminology

3 Experimental setup

3.1 Motivation

3.2 Description

3.2.1 Main method

3.2.2 Strategy 1

3.2.3 Strategy 2

3.2.4 Strategy 3

3.2.5 Strategy 4

3.2.6 Strategy 5

3.2.7 Strategy 6

3.3 Realist model

4 Experimental Results

4.0.1 Main method

4.0.2 Strategy 1

4.0.3 Strategy 2

4.0.4 Strategy 3

4.0.5 Strategy 4

4.0.6 Strategy 5

4.0.7 Strategy 6

5 Discussion

6 Conclusion

7 References

References

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