

Evaluating the generalizability of a machine learning model to predict predict student dropout within learning platforms: Insights from two university courses

Motivation

The transition to digital learning platforms challenges the self-regulated learning skills of students. While this might exacerbate course dropouts among some students, the learning platforms are collecting valuable data traces. These could be **leveraged to identify students at risk**. Yet, there is little knowledge to what extent such models **are useful for iterations of the course** in the following years.

Task

The tasks includes the development of an extensively-commented R/Python project following the steps of CRISP-DM. Related work in the literature should be elaborated.

Expected results

You are expected to (i) preprocess the data, (ii) define meaningful and valuable features, (iii) implement and evaluate state-of-the-art machine learning models and (iv) discuss the findings.

Title English

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Level: Master thesis

Methodology

- Data analytics techniques

Special prerequisites

- Background on common data analytics techniques is required.

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