Adaboost-multilayer perceptron to predict the student's performance in software engineering

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ABSTRACT

Software Engineering (SE) course is one of the backbones of today's computer technology sophistication. Effective theoretical and practical learning of this course is essential to computer students. However, there are many students fail in this course. There are many aspects that influence a student's performance. Currently, student performance analysis methods just focus on historical achievement and assessment methods given in the class. Need more research to predict student's performance to overcome the problem of student failing. The objective of this research is to perform a prediction for student's performance in the SE using enhanced Multilayer Perceptron (MLP) machine learning classification with Adaboost. This research also investigates the requirements of each student before registering in this course. This research achieved 87.76 percent accuracy in classifying the performance of SE students.

KEYWORDS

Adaboost; Education; Machine learning; Multilayer perceptron; Software engineering

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