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Student Academic Performance Monitoring and Evaluation using Data Mining Techniques

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Abstract: Predicting students' performance is an essential activity towards the success of the world's education sector. However, the action continues to present itself as a challenging task due to the existing large data amounts in educational databases. On the other hand, some Institutions lack systems that are capable of analyzing and monitoring students' performance. This problem could be partially due to a lack of awareness about the importance of predicting students' performance. In addition to that, the existing studies on performance prediction methods are still inadequate in identifying and convincing educators with the most suitable method for predicting students' performance. This review explores the commonly used data mining techniques to predict students' performance in previous studies to find out the most suitable technology that can be trusted with predicting students' performance. The result of the study showed that the decision trees algorithm is the best classification technique that gives trusted and accurate results when it comes to student performance prediction. Predicting students' performance helps in monitoring the students' progress, both pass and fail, and therefore provides a gap for early interventions and decision making by educators. This opportunity dramatically helps in promoting the education sector by raising the academic standards of educational Institutions.

Keywords: EDM, Data, mining, feature, accuracy etc

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