

# A Method of Classification in Student Grade Prediction using SMOTE Oversampling Technique

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**Abstract:** *The prediction of student academic performance is the most difficult task in educational institutions, which helps to improve the students performance in further semesters. Though we have many kinds of machine learning techniques we have disadvantages while handling the imbalanced data sets. It is also difficult to balance the large data sets which leads to obtain the predictions with less accuracy and false predictions. To overcome this disadvantages we will be using SMOTE technique which means Synthetic Minority Oversampling Method. It helps to obtain high accuracy by comparing the different machine learning algorithms used. The proposed methodology gives us the accurate results and best prediction of student grades*

**Keywords:** Machine Learning, Algorithms, SMOTE, Grade Prediction, multi-class classification.

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