**PASS RATES PREDICTOR**

**ABSTRACT**

Since student performance and pass rates in College reflect teaching level of the College and even all education system, it is critical to improve student pass rates and reduce dropout rates. Decision Tree (DT) algorithm and Support Vector Machine (SVM) algorithm in data mining, have been used by researchers to find important student features and predict the student pass rates, however they did not consider the coefficient of initialization, and whether there is a dependency between student features. Therefore, in this study, we propose a new concept: features dependencies, and use the grid search algorithm to optimize DT and SVM, in order to improve the accuracy of the algorithm. Furthermore, we added 10-fold cross-validation to DT and SVM algorithm. The results show the experiment can achieve better results in this work. The purpose of this study is providing assistance to students who have greater difficulties in their studies, and students who are at risk of graduating through data mining techniques.

**MODULES**

1. Faculty
2. Admin
3. Student

**Technology**

Python-Django