IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 3, November 2024

Early Prediction on Students Performance

Prof. Kanade. P. G[1] and Priyanka Achat[2]
Department of ComputerEngineering[1,2]
SND College of Engineering and Research Center, Yeola, Nashik, India

Abstract: *Early indications regarding students' progress help academics to optimise their learning strategies and focus on diverse educational practices to make the learning experience success- fully. Machine learning application can help academics to predict the expected weaknesses in learning processes and as a result they can proactively engage such students in better learning experience. We applied logistic regression, linear discriminant analysis, K-nearest neighbors, classification and regression trees, gaussian Naive Bayes and support vector machines on historical data of student grades in one of the undergraduate courses and developed a model to predict the grades of students taking the same course in the next term . Our experiments show Linear discrimination analysis as the most effective approach to correctly predict the students' performance outcome in final exams. Out of total 54 records, 49 were predicted by model as expected giving 90.74*

Keywords: SVM, computer vision, neural networks. Machine Learning, Predictive Analytics, Forecasting Student Performance, Linear Discriminant Analysis