

LITERATURE SURVEY

In this paper, we propose a solution to enhance university admission system using different machine learning techniques like K-Nearest Neighbour(KNN), Decision Tree(DT) and Random Forest(RF). A deterministic algorithm is used to create a basis for the analysis, followed by several probabilistic algorithms, KNN, decision tree, and random forest. The outcomes are compared and a consensus is reached in categorising each student whether they got accepted, placed in foundation or rejected in the desired institute. Processing university applications is time-consuming for admission staff members, it is not efficient in terms of cost and time, thus it can sometimes be an overwhelming task, the chances of bribes occurring, or discrimination is highly likely to occur. The solution for this problem is to automate the application process thus using the help of a software with several embedded AI algorithm that improves the efficiency and reliability of the application process.[1]

Students applying for admissions to universities find it difficult to understand whether they have good chances of getting admission in a university or not. Keeping this in focus, we have used logistic regression techniques that have gained attention in software engineering field for its ability to be used for predictions. This is a novel work on a university admissions predictor using which students can evaluate their competitiveness for getting admission at a university. This is developed by collecting real student data. The data is stored in a form of a usable training data for the logistic regression classifier developed to make admissions predictions. We have collected the data from the Internet using a Selenium web scraper. The paper intensely discusses the methods, implementation and challenges faced in the process. [2]

In the 21st century, University educations are becoming a key pillar of social and economic life. It plays a major role not only in the educational process but also in the ensuring of two important things which are a prosperous career and financial security. However, predicting university admission can be especially difficult because the students are not aware of admission requirements. For that reason, the main purpose of this research work is to provide a recommender system for early predicting university admission based on four Machine Learning algorithms namely Linear Regression, Decision Tree, Support Vector Regression, and Random Forest Regression. The experimental results showed that the Random Forest Regression is the

most suitable Machine Learning algorithm for predicting university admission. Also, the Cumulative Grade Point Average (CGPA) is the most important parameter that influences the chance of admission.[3]

Accurate prediction to college entrance examination(CEE) results is very important for the candidates to fill in the application and the relevant analysis of the CEE. At present, the prediction of CEE scores is based on data statistics, probability model and some weighted combination models. Since generating the model for predicting college admission lines uses too little reference factor, and the error is relatively large, so the reference value is very small. In this paper, machine learning methods are used to carry out the college admission lines of research and prediction. Specially, in this paper Adaboost algorithm is used to study and forecast, which belongs to ensemble learning. Finally, the result of this model is given, which is better than the current prediction method.[4]

This paper presents a new college admission system using hybrid recommender based on data mining techniques and knowledge discovery rules, for tackling college admissions prediction problems. This is due to the huge numbers of students required to attend university colleges every year. The proposed HRSPCA system consists of two cascaded hybrid recommenders working together with the help of college predictor, for achieving high performance. The first recommender assigns student's tracks for preparatory year students. While the second recommender assigns the specialized college for students who passed the preparatory year exams successfully. The college predictor algorithm uses historical colleges GPA students admission data for predicting most probable colleges. The system analyzes student academic merits, background, student records, and the college admission criteria. Then, it predicts the likelihood university college that a student may enter. A prototype system is implemented and tested with live data available in the On Demand University Services (ODUS) database resources, at King Abdulaziz University (KAU). In addition to the high prediction accuracy rate, flexibility is an advantage, as the system can predict suitable colleges that match the students' profiles and the suitable track channels through which the students are advised to enter. The system is adaptive, since it can be tuned up with other decision makers attributes performing trusted needed task faster and fairly.[5]

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