UNIVERSITY ELIGIBILITY ADMIT PREDICTOR

Abstract:

In today's era we see a lot of students pursuing their education away from their home countries. As the students do not have much idea about the procedures, requirements, and details of the universities, they seek help from the education consultancy firms to help them successfully secure admission in the universities which are best suitable for their profile, for this they must invest huge amount of money as consultancy fees. Apart from these education consultancy firms there are few websites and blogs that guide the students on the admission procedures. The drawback of the currently available resources is that they are limited and they are not truly dependable taking into consideration their accuracy and reliability. The aim of this project is to develop a system using machine learning algorithms, we will name it University Eligibility Admit Predictor. It will help the students to identify the chances of their application to a university being accepted. Also, it will help them in identifying the universities which are most suitable for their profile and provide them with the details of those universities. A simple user interface will be developed for the users to access the eligibility predictor system.

Introduction:

A person's education plays a vital role in their life. While planning for education students often have several questions regarding the courses, universities, job opportunities, expenses involved, etc. Securing admission to their dream university is one of their main concerns. It is seen that often students prefer to pursue their education from universities which have global recognition. With most worlds highly reputed universities, wide range of courses offered in every sector, highly accredited education system and teaching, scholarships provided to

students, best job market and many more advantages make it the dream destination for the international students. The students must shortlist the universities which are best known for the courses they are looking for and they should have an idea about their chances of securing admission in those universities based on their profile. This task of shortlisting the universities where the student has high chances of admission is difficult for the international students, so they end up with applying to many universities in hopes of getting admission in few of them thus investing an extra amount of money in the applications. There are several portals and websites which provide information and help to students in shortlisting universities, but they are not reliable. Most of the students do not take the risk of evaluating the colleges by themselves, and they seek the help of the education consultancy firms to do it for them. Again, for this student must pay a huge amount of fee to the education consultant.

The primary objective of this research is to develop a system to solve the problems faced by the students while applying for universities. We will be developing a University Eligibility Admit Predictor system which will help the students to predict the chances of their application being selected for a particular university for which they wish to apply based on their profile. Also, the system will provide a recommendation of universities to the student to which the student has a high possibility of getting admission.

Advantage:

- It helps student for making decision for choosing a right college.
- Here the chance of occurrence of error is less when compared with the existing system.
- It is fast, efficient, and reliable.

- Avoids data redundancy and inconsistency.
- Very user-friendly.
- Easy accessibility of data.

Disadvantage:

- Required active internet connection.
- System will provide inaccurate results if data entered incorrectly.

Related Work:

A considerable number of researches and studies have been done on graduation admission datasets using several types of machine learning algorithms. One impressive work by Acharya et al. has compared between 4 different regression algorithms, which are: Linear Regression, Support Vector Regression, Decision Trees, Random Forest, to predict the chance of admit based on the best model that showed the least MSE which was multilinear regression.

In addition, Chakrabarty et al. compared between both linear regression and gradient boosting regression in predicting chance of admit; point out that gradient boosting regression showed better results.

Gupta et al. developed a model that studies the graduate admission process in American universities using machine learning techniques. The purpose of this study was to guide students in finding the best educational institution to apply for. Five machine learning models were built in this paper including SVM (Linear Kernel), AdaBoost, and Logistic classifiers.

Waters and Miikkulainen proposed a remarkable article that helpsin ranking graduation admission application according to the level of acceptance and

enhances the performance of reviewing applications using statistical machine learning.

Sujay applied linear regression to predict the chance of admitting graduate students in master's programs as a percentage. However, no more models were performed.

Conclusion:

The main objective of this research was to develop a prototype of the system that can be used by the students aspiring to pursue their education in their dreamed universities. The model can be used by the students for evaluating their chances of getting shortlisted in a particular university with an average accuracy of 75%. It will help the students to make better and faster decisions regarding application to universities.

References:

1. M. S. Acharya, A. Armaan, and A. S. Antony, "A comparison of regression models for prediction of graduate admissions," ICCIDS 2019 - 2nd Int. Conf. Compute. Intell. Data Sci. Proc., pp. 1–5, 2019.

2.N. Chakrabarty, S. Chowdhury, and S. Rana, "A Statistical Approach to Graduate Admissions' Chance Prediction," no. March, pp. 145–154, 2020.

3. N. Gupta, A. Sawhney, and D. Roth, "Will I Get in? Modeling the Graduate Admission Process for American Universities," IEEE Int. Conf. Data Min. Work. ICDMW, vol. 0, pp. 631–638, 2016.

4.A. Waters and R. Mikkilineni, "GRADE: Graduate Admissions," pp. 64–75, 2014.

5. S. Sujay, “Supervised Machine Learning Modelling & Analysis for Graduate Admission Prediction,” vol. 7, no. 4, pp. 5–7, 2020.