

APPLIED DATA SCIENCE

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

LITERATURE SURVEY

REFERENCE PAPER

1. 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE)- <https://in.docworkspace.com/d/sIFHX-7Fk6tyLmQY?sa=00&st=0//>

- Every year many students apply for graduate admission to different universities. To select an applicant, each university has different selection criteria such as GRE score, CGPA, research background, statement of purpose, letter of recommendation, university rating etc. There are some web applications as well as some consultancy services for suggesting the appropriate university based on students' portfolio. These help to give an idea which universities should be applied for admission. But they have limitations because humans are incapable of considering all the conditions and universities.
- Moreover, web applications have accuracy problems. In this study, we have proposed a deep neural network (DNN) to predict the chance of getting admitted to a university according to the students portfolio. All the selection criteria are considered here to predict the chance of admission. The DNN model has been compared with existing methods in terms of different performance metrics including mean squared error (MSE), root mean squared error (RMSE), mean absolute error (MAE), R-squared score. It has shown the most promising result that includes R-squared score of 0.8538 and MSE of 0.0031.

2. Global Journal of Research and Review 2021 Published on October 16, 2021-
<https://www.imedpub.com/global-journal-of-research-and-review//>

- In the present schooling world there are numerous quantities of understudies who need to seek after Higher training in the wake of Engineering or any Graduate certification course. Advanced education in the sense, a few groups need to do MTech through GATE or through any Educational Institution Entrance Examination and a few groups need to do MBA through CAT or through any

individual Educational Institution Entrance Examination and a few groups need to do Masters in abroad colleges. Understudy Confirmation issue is vital in Educational Institution .We are addressing AI models to anticipate the opportunity of an understudy to be conceded to a Master's program. This will help understudies to know ahead of time in the event that they get an opportunity to get acknowledged. The Machine learning models are Linear relapse, Decision tree regressor and Random Forest regressor. Investigations show that the Linear Regression model outperforms different models. One amazing work by Acharya et al. has looked at between 4 changed relapse calculation which are: Linear Regression, Support Vector Regression, Decision Trees and Random Forest, to anticipate the opportunity of concede dependent on the best model that showed the least MSE which was multi linear relapse.

- Model determination is the way toward choosing one last AI model from among an assortment of applicant AI models for a training dataset. Model selection is a cycle that can be across models of a similar sort arranged with various model hyper parameters.

3. Graduate Admission Prediction Using Machine Learning Techniques Published on 7 , July 2021 <http://www.ijarset.com/upload/2021/july/07-mail2vkk-07.PDF>

- In India every year lacks of students getting the graduation degree and willing to join post-graduation in other countries. Newly graduate students usually are not knowledgeable of the requirements and the procedures of the postgraduate admission and might spent a considerable amount of money to get advice from consultancy organizations to help them identify their admission chances. Human consultant and calculations might be bias and inaccurate. This paper helps on predicting the eligibility of Indian students getting admission in best university based on their Test attributes like GRE,TOEFL,LOR,CGPA etc. according to their scores the possibilities of chance of admit is calculated.
- In the Existing System, Many machine algorithms are used to the prediction of Graduate Admission. The existing system compares the four machine learning algorithms on the basis of accuracy. The algorithms are Linear Regression, Support Vector Regression, Random forest Regression, Decision Tree Regression. In this system Linear Regression performs the best on the dataset with low MSE and high R2 score. shows sample data set, the dataset contains 500 rows and 7 independent variables of data.
- Student admission problem is very important in educational institutions. In this

project addresses machine learning models to predict the chance of a student to be admitted.

- This will assist students to know in advance if they have a chance to get accepted. Machine learning models were performed to predict the opportunity of a student to get admitted to a Program.

4. College Admission Prediction using Ensemble Machine Learning Models published on 12, Dec 2021 <https://www.irjet.net/archives/V8/i12/IRJET-V8I1266.pdf>

- This paper aims to build a model that can help students to pick the right universities based on their profiles. We can judge across a wide variety of domains that include MS (international), M.Tech (India) and MBA (India and International). For the accurate predictions we plan on training a machine learning model in order to provide results. The dataset contains information on the student profile and the university details with a field detailing if the admission was positive or not. Various algorithms have been used i.e. Ensemble Machine Learning and the predictions have been compared using key performance indicators (KPIs). The model performing the best is then used to evaluate the dependent variable i.e. The chances of admit to a university. The chances of admit variable is a variable ranging from 0 to 1 which equates to the predicted probability of successful acceptance to a university. We also aim to create a portal which filters and then provides a list of universities that fall into the profile's Acceptance range.
- Educational organizations have always played an important and vital role in society for development and growth of any individual. There are different college prediction apps and websites being maintained contemporarily, but using them is tedious to some extent, due to the lack of articulate information regarding colleges, and the time consumed in searching the best deserving college.

5. Predictive Models of Student College Commitment Decisions Using Machine learning published on 8, May 2020 <https://doi.org/10.3390/data4020065>

- There are many examples of the application of machine learning techniques to analyze data and other information in the context of educational settings. This area of study is generally known as “educational data mining” (EDM) and it is a recently emergent field with its own journals [15], conferences [16] and research community [17,18]. A subset of EDM research that focuses on analyzing data in

order to allow institutions of higher education better clarity and predictability on the size of their student bodies is often known as enrollment management. Enrollment management is “an organizational concept and systematic set of activities whose purpose is to exert influence over student enrollment” [7].

- There are many websites which purport to predict college admission from the perspective of an aspiring student. A few examples are go4ivy.com¹, collegeai.com², project.chanceme³, and niche.com⁴. Websites such as these claim to utilize artificial intelligence to predict a student’s likelihood of being admitted to a college of their choice without providing specific details about software used and techniques implemented. Our work differs in that we are predicting the likelihood of a student accepting an admission offer from a college not providing an estimate of the chances of a student’s admission to college. Unlike these websites, we provide a complete description of our materials and methods below.
- We acknowledge that the specific educational context in which we apply several machine learning algorithms to the analysis of “big data” obtained from the college admission process appears for literatures.

6. Prediction of Admission Process for Gradational Studies using AI Algorithm published on 2020 <http://creativecommons.org/licenses/by/4.0/>

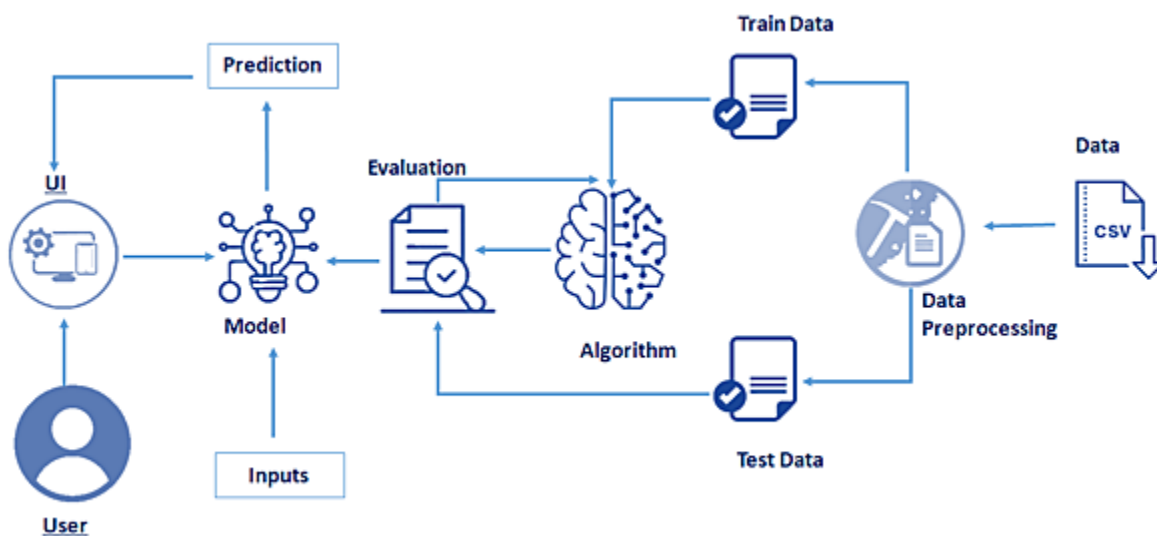
- Bayesian Networks were utilized by to make a choice emotionally supportive network for assessing the application put together by global scholars in the college. This representation was intended to anticipate the exhibition of the hopeful scholars by contrasting them and the presentation of scholar at present concentrating in the college and had a comparative outlined throughout their application. Right now on the present understudy's profile the representation anticipated whether the hopeful understudy ought to be allowed admission to the college. Since the correlations were made distinctly with the scholars who were at that point approved in the college and the information of the scholars who are deprived of confirmation were excluded from the examination this representation end up being less effective because of the issue of class lopsidedness
- (Mishra and Sahoo) (2016) looked into from a college perspective to anticipating the probability of the scholar trying out the college after they have verified regarding courses in the college. They utilized the K- Means calculation for bunching the scholars depending on various components like criticism, family pay, family occupation, guardians capability, inspiration, and so forth to anticipate

the scholars will enlist at the college or not. Contingent on the likeness of the traits between the scholars that are assembled into groups and choices are completed.

- The goal of the Representation to build the enrolment of the Scholars in the colleges.

PROBLEM STATEMENT

Students are often worried about their chances of admission to University. The aim of this project is to help students in Short listing universities with their profiles. The predicted output gives them a fair idea about their admission chances in a particular university. This analysis should also help students who are currently preparing or will be preparing to get a Better idea.



SOLUTION

In the present world Many of them are demented to choose the colleges after their schoolings and under graduate degree. Using University admission eligibility predictor students can login and enter all the required data to know the chance of getting admission in preferred university and college and the students those who are currently in schoolings can also have an idea of their admission process. The prediction process is based on the cut-off and entrance exams conducted by individual universities and colleges using machine learning algorithm .If the students having same cut-off then the prediction will be based on marks scored by them.