

# UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

Team ID : PNT2022TMID20988

## Paper-1

**Title:** University Admission Prediction using Google vertex AI.

**Author:** Kruthika, Apeksha ,Chinmaya , Madhumathi , Veena.

**Year of publication:** 2022

## Methodology:

The primary objective of this work is to make a Machine Learning model which could be utilized by understudies who need to seek after their Education. Many AI algorithms were used for this examination. Linear Regression model contrasted with different models gives the best outcome. At long last, understudies can have an open-source AI model which will assist the understudies with knowing their opportunity of entrance into a specific college with high exactness.

## Advantage:

At the point when the data to an algorithm is too enormous to ever be processed and it is suspected to be repetitive then it very well may be changed into a diminished arrangement of highlights. Deciding a subset of the initial features is called feature selection.

## Disadvantage:

Particular student may or may not attend all of the exams that is given in the criteria.

## **Paper-2**

**Title:** Personalized College Recommender and Cutoff Predictor for Direct Second Year Engineering.

**Author:** Abdul Ragab, Abdulfatah S Mashat, Ahmed Khedra.

**Year of publication:** 2022

### **Methodology:**

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. 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 tasks faster and fairly.

### **Advantage:**

A prototype system is implemented and tested with live data available in the On Demand University Services (ODUS) database resources.

### **Disadvantage:**

It doesn't work efficiently for smaller datasets while listing out the university.

## **Paper-3**

**Title:** Prediction of the admission lines of college entrance examination based on machine learning.

**Author:** Zhenru Wang.

**Year of publication:** 2016 2nd IEEE conference.

### **Methodology:**

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.

### **Advantage:**

Adam optimizer is that the learning rate does not need to be defined. The parameters had optimized depending on the number of weak learners and the learning rate value concerning the ensemble boosting classifier called Adaboost.

### **Disadvantage:**

Need more data in the future, we can also add university admission line Forecasts which are very significant work ,there are still a lot of things to be improved, and in the aspect of feature selection.

## **Paper-4**

**Title:** Prediction Probability of Getting an Admission into a University using Machine Learning

**Author:** Sivasangari, Shivani, Bindhu, Deepa, Vignesh

**Year of publication:** 2021

### **Methodology:**

In the present conditions, students regularly have difficulty finding a fitting institution to pursue higher studies based on their profile. There are some advisory administrations and online apps that recommend universities but they ask huge consultancy fees and online apps are not accurate. So, the aim of this research is to develop a model that predict the percentage of chances into the university accurately. This model provides also the analysis of scores versus chance of prediction based on historical data so that students can understand whether their profile is suitable or not. The proposed model uses linear regression and random forest algorithms but cat boost algorithm is giving highest accuracy.

### **Advantage:**

The proposed model gives a clear idea about the chances of eligibility of the student into the particular list of university.

### **Disadvantage:**

The eligibility criteria is mostly decided based on the CGPA, mark of the student since it is considered more important.

## **Paper-5**

**Title:** Prediction Probability of Getting an Admission into a University using Machine Learning

**Author:** Mukesh Kumar, A J Singh, Disha Handa

**Year of publication:** 2017.

### **Methodology:**

Every institution has their own criteria for analyzing the performance of the students. The reason for this happening is due to the lack of study on existing prediction techniques and hence to find the best prediction methodology for predicting the student academics progress and performance. Another important reason is the lack in investigating the suitable factors which affect the academic performance and achievement of the student in particular course

### **Advantage:**

Different data mining techniques which have been used to predict the student progress and performance and hence how these prediction techniques help to find the most important student attribute for prediction.

### **Disadvantage:**

Actually, we want to improve the performance of the student in academic by using best data mining techniques. At last, it could also provide some benefits for faculties, students.

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1.	University Admission Prediction using Google vertex AI.	Kruthika Apeksha Chinmaya Madhumathi Veena	The primary objective of this work is to make a Machine Learning model which could be utilized by understudies who need to seek after their Education. Many AI algorithms were used for this examination. Linear Regression model contrasted with different models gives the best outcome. At long last, understudies can have an open-source AI model which will assist the understudies with knowing their opportunity of entrance into a specific college with high exactness.	At the point when the data to an algorithm is too enormous to ever be processed and it is suspected to be repetitive then it very well may be changed into a diminished arrangement of highlights. Deciding a subset of the initial features is called feature selection.	Particular student may or may not attend all of the exams that is given in the criteria.
2.	Personalized College Recommender and Cutoff Predictor for Direct Second Year Engineering.	Abdul Ragab, Abdulfatah S Mashat Ahmed Khedra	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. 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 tasks faster and fairly	A prototype system is implemented and tested with live data available in the On Demand University Services (ODUS) database resources.	It doesn't work efficiently for smaller datasets while listing out the university.

S.N O	PAPER TITLE	AUTHOR	METHODOLOGY	ADVANTAGE	DISADVANTAGE
3	Prediction of the admission lines of college entrance examination based on machine learning.	Zhenru Wang.	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.	Adam optimizer is that the learning rate does not need to be defined. The parameters had optimized depending on the number of weak learners and the learning rate value concerning the ensemble boosting classifier called Adaboost.	Need more data in the future, we can also add university admission line Forecasts which are very significant work ,there are still a lot of things to be improved, and in the aspect of feature selection.
4.	Prediction Probability of Getting an Admission into a University using Machine Learning	Sivasangari,Shivani, Bindhu, Deepa, Vignesh	In the present conditions, students regularly have difficulty finding a fitting institution to pursue higher studies based on their profile. There are some advisory administrations and online apps that recommend universities but they ask huge consultancy fees and online apps are not accurate. So, the aim of this research is to develop a model that predict the percentage of chances into the university accurately. This model provides also the analysis of scores versus chance of prediction based on historical data so that students can understand whether their profile is suitable or not. The proposed model uses linear regression and random forest algorithms but cat boost algorithm is giving highest accuracy.	The proposed model gives a clear idea about the chances of eligibility of the student into the particular list of university.	The eligibility criteria is mostly decided based on the CGPA, mark of the student since it s considered more important.

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5.	Prediction Probability of Getting an Admission into a University using Machine Learning	Mukesh Kumar, A J Singh, Disha Handa	Every institution has their own criteria for analyzing the performance of the students. The reason for this happening is due to the lack of study on existing prediction techniques and hence to find the best prediction methodology for predicting the student academics progress and performance. Another important reason is the lack in investigating the suitable factors which affect the academic performance and achievement of the student in particular course	Different data mining techniques which have been used to predict the student progress and performance and hence how these prediction techniques help to find the most important student attribute for prediction.	Actually, we want to improve the performance of the student in academic by using best data mining techniques. At last, it could also provide some benefits for faculties, students.