# UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

### **TEAM ID- PNT2022TMID28671**

### Paper-1

<u>Title</u>: Prediction Probability of Getting an Admission into a University using Machine Learning

Author: A. Sivasangari, Shivani Y, Bindhu, D. Deepa

Year of publication: 2021

<u>Methodology:</u>This model predicts the percentage of chances for getting into the university accurately. This model provides the analysis of scores versus chance of prediction on the basis of historical data so that students can get a clear idea whether their profile is suitable or not. The proposed model uses linear regression and random forest algorithms.

<u>Advantage</u>: The proposed model gives a clear idea about the chances of eligibility of the student into the particular university, and gives accuracy of (0.93).

<u>Disadvantage:</u>The eligibility criteria is mostly decided based on the CGPA of the student since it is considered more important.

# Paper-2

*Title*: University Admissions Predictor Using Logistic Regression

Author: Haseeba Fathiya, Lipsa Sadath

Year of publication: 2021

<u>Methodology:</u> 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 the 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 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.

<u>Advantage</u>: To make data collection much easier, web scraping can be Employed, Web scraping is a diversified and a rapidly mutating Field, The web scraper obtains the required hyperlinks from the web, and then extracts the data from these retrieved links and then stores it in a file, so that the data can be used for analysis.

<u>Disadvantage</u>:Since the dataset is going to be different for each university, the model will have different performances for each of them. Some of the accuracies for the scraped Universities, the approximate accuracy predicted is 69.23%.

# Paper-3

<u>Title</u>:Personalized College Recommender and Cutoff Predictor for Direct Second Year Engineering

<u>Author:</u> Abdul Majeed Inamdar, Tanmay Mhatre, Pravin Nadar, Supriya Josh

*Year of publication:* 2022

<u>Methodology:</u> During the admission process the students always need to check the previous years cutoff of each college by visiting numerous websites & pdf lists which certainly consumes a lot of time. In this web application we will provide cutoff prediction of each college by the data-analysis of previous years cutoff, recommendation system for colleges listing according to student preferences, furthermore providing detailed comparison between institutions of their choice.

<u>Advantages</u>: Since this application is developed to bestow a personalized system so as to reduce time and ease the student's college selection process.

<u>Disadvantage:</u>It doesn't work efficiently for smaller datasets while training. And such larger datasets are not available on the web.

#### Paper-4

<u>Title</u>: Prediction of the admission lines of college entrance examination based on machine learning.

Author: Zhenru Wang, Yijie Shi

*Year of publication:* 2016

<u>Methodology:</u> Accurate prediction of 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 models and some weighted combination models. Since generating the model for predicting college admission lines uses too little reference factor, 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.

<u>Advantage:</u>Specifically, in this paper the 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.

<u>Disadvantage</u>. There are still a lot of things to be improved, and in the aspect of feature selection, we only forecast the college entrance examination of Sichuan province. We need more data in the future, we can also add university admission line Forecasts which are very significant work.

# Paper-5

<u>Title:</u> University Admission Prediction using Google vertex AI.

<u>Author</u>: Jayashree Katti, Jony Agarwal, Swapnil Bharata, Swati Shinde, Saral Mane, Vinod Biradar.

*Year of publication:* 2022

<u>Methodology</u>: College undergraduates frequently have an inclination to ponder over the chance that their profile suits the college requirements. Computer programs are exceptionally well trained and faster than humans in making decisions. Moreover, the cost of admission in a college is a lot, making it very crucial for a student that their profile gets shortlisted for a university admission.

<u>Advantage</u>: The proposed method considers diverse variables related to the student and his score in various tests. The dataset includes LOR, GRE score, CGPA, TOEFL score, University rating, SOP, etc. Based on all these criterias, the admission to a particular university of an undergraduate will be predicted.

<u>Disadvantage:</u> A particular student may or may not attend all of the exams that is given in the criteria

| S.NO | PAPER TITLE   | AUTHOR   | METHODOLOGY   | ADVANTAGE  | DISADVANTAGE   |
|------|---|--|---|--|--|
| 1    | Prediction Probability of Getting an Admission into a University using Machine Learning | 1) A. Sivasangari;<br>2) V. Shivani<br>3) Y. Bindhu<br>4) D. Deepa | This model developed predicts the percentage of chances for getting into the university accurately. This model provides the analysis of scores versus chance of prediction on the basis of historical data so that students can get a clear idea whether their profile is suitable or not. The proposed model | The proposed model gives a clear idea about the chances of eligibility of the student into the particular university, and gives accuracy of (0.93) | The eligibility criteria is mostly decided based on the CGPA of the student since it is considered more important. |

|   |   |                                  | uses linear regression<br>and<br>random forest<br>algorithms   |   |   |
|---|---|----------------------------------|--|---|---|
| 2 | University Admissions Predictor Using Logistic Regression | 1)Haseeba Fathiya 2)Lipsa Sadath | 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 the 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 usable training data for the logistic regression classifier | To make data collection much easier, web scraping can be Employed, Web scraping is a diversified and a rapidly mutating Field, The web scraper obtains the required hyperlinks from the web, and then extracts the data from these retrieved links and then stores it in a file, so that the data can be used for analysis. | Since the dataset is going to be different for each university, the model will have different performances for each of them. Some of the accuracies for the scraped Universities, the approximate accuracy predicted is 69.23%. |

|   |  |  | 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.  |  |   |
|---|--|--|--|--|---|
| 3 | Personalized College<br>Recommender and<br>Cutoff Predictor for<br>Direct Second Year<br>Engineering | 1)Abdul Majeed<br>Inamdar<br>2)Tanmay<br>Mhatre 3)Pravin<br>Nadar<br>4)Supriya Joshi | During the admission process the students always need to check the previous years cutoff of each college by visiting numerous websites & pdf lists which certainly consumes a lot of time. In this web application we will provide cutoff prediction of each college by the data-analysis of previous years cutoff, recommendation system for colleges listing according to student preferences, furthermore providing detailed comparison between | Since this application is developed to bestow a personalized system so as to reduce time and ease the student's college selection process. | It doesn't work efficiently for smaller datasets while training. And such larger datasets are not available on the web. |

|   |   |   | institutions of their choice.  |   |  |
|---|---|---|--|---|--|
| 4 | Prediction of the admission lines of college entrance examination based on machine learning | 1)Zhenru Wang<br>2)Yijie Shi  | Accurate prediction of 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 models and some weighted combination models. Since generating the model for predicting college admission lines uses too little reference factor, 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. | Specifically, in this paper the 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. | There are still a lot of things to be improved, and in the aspect of feature selection, we only forecast the college entrance examination of Sichuan province. we need more data in the future, we can also add university admission line Forecasts which a very significant work. |
| 5 | University Admission Prediction using Google vertex AI                                      | 1)Jayashree Katti,<br>2)Jony Agarwal,<br>3)Swapnil Bharata<br>4)Swati Shinde, | College<br>undergraduates<br>frequently have an<br>inclination to  | The proposed method considers diverse   | A particular student<br>may or may not<br>attend all of the<br>exams that is given   |

| 5)Saral Mane,    | ponder over the    | variables        | in the criteria |
|------------------|--------------------|------------------|-----------------|
| 6) Vinod Biradar | chance that their  | related to the   |                 |
|                  | profile suits the  | student and his  |                 |
|                  | college            | score in         |                 |
|                  | requirements.      | various tests.   |                 |
|                  | Computer           | The dataset      |                 |
|                  | programs are       | includes LOR,    |                 |
|                  | exceptionally well | GRE score,       |                 |
|                  | trained and faster | CGPA, TOEFL      |                 |
|                  | than humans in     | score,           |                 |
|                  | making decisions.  | University       |                 |
|                  | Moreover, the cost | rating, SOP,     |                 |
|                  | of admission in a  | etc. Based on    |                 |
|                  | college is a lot,  | all these        |                 |
|                  | making it very     | criterias, the   |                 |
|                  | crucial for a      | admission to a   |                 |
|                  | student that their | particular       |                 |
|                  | profile gets       | university of an |                 |
|                  | shortlisted for a  | undergraduate    |                 |
|                  | university         | will be          |                 |
|                  | admission.         | predicted.       |                 |
|                  |                    |                  |                 |