

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

Domain: Applied Data Science

Team Id: PNT2022TMID29602

Batch.no:B7-1A3E

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PAPER-I: STUDENT ADMISSION PREDICTOR

PUBLICATION YEAR: 2017

AUTHOR: Himanshu Sonawane

JOURNAL NAME: National College of Ireland

SUMMARY: In today's era we see a lot of students pursuing their education away from their home countries. The main country targeted by these international students is The United States of America. Majority of the international students in the United States of America are from India and China. In the past decade the number of Indian students pursuing post graduate education from the USA has rapidly increased. With the increase in the number of international students studying in the USA, each applicant has to face a tough competition to get admission in their dream university. Generally as the students don't have much idea about the procedures, requirements and details of the universities in the USA 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 have to invest huge amount of money as consultancy fees. Apart from these the 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 very limited and also they are not truly dependable taking into consideration of their accuracy and reliability. The aim of this research is to develop a system using machine learning algorithm's, we will name it as Student Admission Predictor (SAP). It will help the students to identify the chances of their application to an university being accepted. Also it will help them in identifying the universities which are best suitable for their profile and also provide them with the details of those universities.

KEYWORDS: Machine Learning; Data Mining.

PAPER-II: GRADUATE ADMISSION PREDICTION USING MACHINE LEARNING TECHNIQUES

PUBLICATION YEAR: 2018

AUTHOR: K. JeevanRatnakar, G. KoteswaraRao, B. DurgaPrasanth Kumar, G.prithvi, D.VenkataSaiEswar

JOURNAL NAME: International Journal of Advanced Research in Science, Engineering and Technology

SUMMARY: 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.

KEYWORDS: Multiple Linear Regression, Random forest Regression, Multiple Linear Regression, Dimensionality reduction.

PAPER-III: COLLEGE ADMISSION PREDICTOR

PUBLICATION YEAR: 2018

AUTHOR: Annam MallikharjunaRoa, NagineniDharani, A. SatyaRaghava, J.Buvanambigai and K. Sathish

JOURNAL NAME: Journal of Network Communications and Emerging Technologies (JNCET)

SUMMARY: College Admission Predictor System is a web based application system in which students can register their marks along with their personal information. This helps to predict their admissions in colleges. Administrator can add the college details and the batch details. Using this Application, the entrance seat allotment becomes easier and efficient. The main advantage of the project is the computerization of the entrance seat allotment process. Administrator has the power for the allotment. Admin can add the allotted seats into a file and the details are saved into the system. The total time for the entrance allotment becomes lower and the allotment process becomes faster. It helps students to make right decisions for choosing their college. In which students can register with their personal as well as marks details to prediction the admission in colleges and the administrator can allot the seats for the students.

KEYWORDS: Machine Learning

PAPER-IV: PREDICTIVE MODELS OF STUDENT COLLEGE COMMITMENT DECISIONS USING MACHINE LEARNING

PUBLICATION YEAR: 2019

AUTHOR: KanadpriyaBasu ,TreenaBasu , Ron Buckmire and NishuLal

JOURNAL NAME: MDPI

SUMMARY:Every year, academic institutions invest considerable effort and substantial resources to influence, predict and understand the decision-making choices of applicants who have been offered admission. In this study, we applied several supervised machine learning techniques to four years of data on 11,001 students, each with 35 associated features, admitted to a small liberal arts college in California to predict student college commitment decisions. By treating the question of whether a student offered admission will accept it as a binary classification problem , we implemented a number of different classifiers and then evaluated the performance of these algorithms using the metrics of accuracy, precision, recall, F-measure and area under the receiver operator curve. The results from this study indicate that the logistic regression classifier performed best in modelling the student college commitment decision problem, i.e., predicting whether a student will accept an admission offer, with an AUC score of 79.6%.

KEYWORDS: educational data mining; supervised machine learning.

PAPER-V: PREDICTING STUDENT UNIVERSITY ADMISSION USING LOGISTIC REGRESSION

PUBLICATION YEAR: 2020

AUTHOR:Sharan Kumar ParatalaRajagopal

JOURNAL NAME:European Journal of Computer Science and Information Technology

SUMMARY: The primary purpose is to discuss the prediction of student admission to university based on numerous factors and using logistic regression. Many prospective students apply for Master's programs. The admission decision depends on criteria within the particular college or degree program. The independent variables in this study will be measured statistically to predict graduate school admission. Exploration and data analysis, if successful, would allow predictive models to allow better prioritization of the applicants screening process to Master's degree programme which in turn provides the admission to the right candidates.

KEYWORDS: logistic regression, predictive analysis, college admission, data analytics

PAPER-VI:PREDICTING UNDERGRADUATE ADMISSION

PUBLICATION YEAR: 2020

AUTHOR:Md. Protikuzzaman ,MrinalKantiBaowaly, Maloy Kumar Devnath , Bikash Chandra Singh

JOURNAL NAME:International Journal of Advanced Computer Science and Applications

SUMMARY:The university admission tests find the applicant's ability to admit to the desired university. Nowadays, there is a huge competition in the university admission tests. The failure in the admission tests makes an examinee depressed. This paper proposes a method that predicts undergraduate admission in universities. It can help students to improve their preparation to get a chance at their desired university. Many factors are responsible for the failure or success in an admission test. Educational data mining helps us to analyze and extract information from these factors. Here, the authors apply three machine learning algorithms XGBoost, LightGBM, and GBM on a collected dataset to estimate the probability of getting admission to the university after attending or before attending the admission test. They also evaluate and compare the performance levels of these three algorithms based on two different evaluation metrics – accuracy and F1 score. Furthermore, the authors explore the important factors which influence predicting undergraduate admission.

KEYWORDS:Data mining; XGBoost.

PAPER-VII:PREDICTION FOR UNIVERSITY ADMISSION USING MACHINE LEARNING

PUBLICATION YEAR: 2020

AUTHOR:ChithraApoorva D A, MalepatiChanduNath, PetaRohith, BinduShree.S, Swaroop.S

JOURNAL NAME:International Journal of Recent Technology and Engineering (IJRTE)

SUMMARY: This section includes the literature review of previous research on the assessment of student enrolment opportunities in universities. Numerous programs and studies have been carried out on topics relating to university admission used many machine learning models which helps the students in the admission process to their desired universities. Previous research done in this area used Naive Bayes algorithm which will evaluate the success probability of student application into a respective university but the main drawback is they didn't consider all the factors which will contribute in the student admission process like TOEFL/IELTS, SOP, LOR and under graduate score. Bayesian Networks Algorithm have been used to create a decision support network for evaluating the application submitted by foreign students of the university. This model was developed to forecast the progress of prospective students by comparing the score of students currently studying at university. The model thus predicted whether the aspiring student should be admitted to university on the basis of various scores of students.

KEYWORDS: Machine Learning

PAPER-VIII: GRADUATE ADMISSION PREDICTION USING MACHINE LEARNING

PUBLICATION YEAR: 2020

AUTHOR:Sara Aljasmi, Ali BouNassif, Ismail Shahin, Ashraf Elnagar

JOURNAL NAME:International Journal Of Computers And Communications

SUMMARY:Student admission problem is very important in educational institutions. This paper addresses machine learning models to predict the chance of a student to be admitted to a master's program. This will assist students to know in advance if they have a chance to get accepted. The machine learning models are multiple linear regression, k-nearest neighbor, random forest, and Multilayer Perceptron. Experiments show that the Multilayer Perceptron model surpasses other models.

KEYWORDS:Multilayer Perceptron, Multiple linear regression.

PAPER-IX:AN AUTOMATED PREDICTION MODEL FOR COLLEGE ADMISSION SYSTEM

PUBLICATION YEAR: 2021

AUTHOR:Dr.ArunakumariB. N , Vishnu Sastry H K, SheetalNeeraj ,Shashidhar R

JOURNAL NAME:Ilkogretim

SUMMARY:At present, many students make mistakes in their preference list of colleges because of various reasons like inaccurate analysis of colleges, lack of knowledge, and apprehensive prediction. Later, they end up regretting the same after allotment. Our application addresses this issue of the student admission community. The application uses data mining and data analysis techniques. Rank, category, preferred branches, preferred district, and preferred colleges are taken as input and the preference list, on thorough analysis of the last five years' cut-off data is generated. In this paper, an attempt has been made to develop an automated web application prediction model for a college admission system which can be used to make a wise choice of college before allotment.

KEYWORDS:Data mining, Data Analysis.

PAPER-X:COLLEGE ADMISSION PREDICTION USING ENSEMBLE MACHINE LEARNING MODELS

PUBLICATION YEAR: 2021

AUTHOR: Vandit Manish Jain, Rihaan Satia

JOURNAL NAME: International Research Journal of Engineering and Technology (IRJET)

SUMMARY: 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.

KEYWORDS: Machine Learning

TITLE	AUTHOR	YEAR	CONCEPT OF THE PAPER	TECHNIQUES USED
STUDENT ADMISSION PREDICTOR	Himanshu Sonawane	2017	In this Paper,machine learning algorithm has been is used along with the data mining to predicting student admission.	Machine Learning; Data Mining.
COLLEGE ADMISSION PREDICTOR	Annam MallikharjunaRoa, NagineniDharani, A. SatyaRaghava, J. Buvanambigai , K. Sathish	2018	In this paper, machine Learning are used to find wheather the student are eligible to the admission or not by means of their marks.	Machine Learning
GRADUATE ADMISSION PREDICTION USING MACHINE LEARNING TECHNIQUES	K. JeevanRatnakar, G. KoteswaraRao, B. DurgaPrasanth Kumar, G.prithvi, D.VenkataSaiEswar	2018	This paper helps on predicting the eligibility of Indian students getting admission in best university based on their Test attributes like GRE,TOEFL,LOR,C GPA etc. according to their scores the possibilities of chance of admit is calculated.	Multiple Linear Regression, Random forest Regression, Multiple Linear Regression, Dimensionality reduction.
PREDICTIVE MODELS OF STUDENT COLLEGE COMMITMENT DECISIONS USING MACHINE LEARNING	KanadpriyaBasu , TreenaBasu , Ron Buckmire and NishuLal	2019	In this Paper, several supervised machine learning techniques used to predict student college commitment decisions.	educational data mining; supervised machine learning.

PREDICTING STUDENT UNIVERSITY ADMISSION USING LOGISTIC REGRESSION	Sharan Kumar ParatalaRajagopal	2020	In this paper , the prediction of student admission to university based on numerous factors and using logistic regression to admit them.	logistic regression, predictive analysis, college admission, data analytics
PREDICTING UNDERGRADUATE ADMISSION	Md. Protikuzzaman, MrinalKantiBaoway , Maloy Kumar Devnath , Bikash Chandra Singh	2020	In this paper, authors apply three machine learning algorithms XGBoost, LightGBM, and GBM on a collected dataset to estimate the probability of getting admission to the university after attending or before attending the admission test.	Data mining; XGBoost.
PREDICTION FOR UNIVERSITY ADMISSION USING MACHINE LEARNING	ChithraApoorva DA, MalepatiChanduNat , PetaRohith, BinduShree.S, Swaroop.S	2020	In this paper, machine learning models used to predict the chance of a student to be admitted to a master's program.	Machine Learning
GRADUATE ADMISSION PREDICTION USING MACHINE LEARNING	Sara Aljasmi, Ali BouNassif, Ismail Shahin, Ashraf Elnagar	2020	This paper addresses machine learning models to predict the chance of a student to be admitted to a master's program.	Multilayer Perceptron, Multiple linear regression.
AN AUTOMATED PREDICTION MODEL FOR COLLEGE ADMISSION SYSTEM	Dr.ArunakumariB. N, Vishnu Sastry H K, SheetalNeeraj , Shashidhar R	2021	In this paper, an attempt has been made to develop an automated web application prediction model for a college admission system which can be used to make a wise choice of college before allotment.	Data mining, Data Analysis.

COLLEGE
ADMISSION
PREDICTION
USING ENSEMBLE
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Vandit Manish Jain,
Rihaan Satia

2021

This paper aims to
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Machine Learning