University Admit Eligibility Predictor

Submitted by

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ABSTRACT

Students are often worried about their chances of admission to University. The aim of this project is to help students in shortlisting 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.

LITERATURE SURVEY

Name: Predicting Undergraduate Admission

Year: 2017

Authors : Md. Protikuzzaman, Mrinal Kanti Baowaly

About: 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.

Algorithms :XGBoost,LightGBM,GBM Accuracy: 87,93,95

LITERATURE SURVEY

Name: Analysis & Prediction of American Graduate Admissions Process

Year: 2018

Author : Bhavya Ghai

About: This project tries to understand American Graduate Admissions process by specifically analyzing MS Computer Science application over past 5 years. They have tried to model admissions data based on patterns extracted from data and

domain knowledge. The key to analyzing Graduate Admissions data is to analyze data in buckets rather than considering all in one bucket. The project aims to help students choose the right Universities by predicting whether a student will be admitted to a specific University. This model uses four types of machine learning algorithms Decison Tree, Random Forest,AdaBoost and Naive Bayes and achieved highest accuracy of 69.79

Algorithms :Decision Tree,Random Forest,AdaBoost,Naive Baye's Accuracy: 51.79,55.7,60.75,69.79

LITERATURE SURVEY

Name: Applications of Supervised Learning Techniques on Undergraduate Admissions Data

Year: 2016

Author : Thomas Lux,Randall Pittman,Maya Shende,Anil Shende

About: Here they discussed about the use of supervised learning techniques,namely perceptrons and support vector machines, in predicting admission decisions and enrollment based on historical applicant data. They show through experimental results that a classifier, trained and validated on previous years' data,can identify with reasonable accuracy those applicants that the admissions office is likely to accept (based on historical decisions made by the admissions office), and of the accepted applicants, those ones that are likely to enroll at the institution. Additionally, the results from our feature selection experiments can inform admissions offices of the significance of applicant features relative to acceptance and enrollment, thus aiding the office in future data collection and decision making.They achieved a highest accuracy of 94.57 in this model

Algorithms :MultiLayer Perceptron,SVM Linear,SVM Poly's

Accuracy: 94.57,94.45,94.36

LITERATURE SURVEY

Name: Graduate Admission Prediction Using Machine Learning

Year: 2020

Author : K. JeevanRatnakar, G. Koteswara Rao, B. DurgaPrasanth Kumar, G.prithvi, D.Venkata SaiEswar

About: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 with a accuracy of 95.43

Algorithms :Multiple Linear Regression,K-Nearest Neighbor, Random Forest, Multilayer Perceptron Accuracy: 87.67,78.50,88.90,95.43

LITERATURE SURVEY

Name: Prediction of Admission Process for Gradational Studies using Al Algorithm

Year: 2020

Author : Saurabh Singhal, Ashish Sharma

About: They have worked to build up a framework utilizing AI algorithms, named it as Graduate Admission Prediction(GAP). GAP will assist the scholars by predicting the chance to get seat in Fantasy College. This paper compares and recognizes which AI algorithm is going to give precise outcome. A straight forward UI will be created for clients to get to the framework. They have used Regression Algorithms to build this model and gained accuracy of 93

Algorithms :Multi Linear Regression, Polynomial Regression, Random Forest Accuracy: 73,64,93

LITERATURE SURVEY

Name: Student Admission Predictor

Year: 2017

Author : Himanshu Sonaware

About: 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 algorithms.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. A simple user interface will be developed for the users to access the SAP system.

Algorithms :K-Nearest Neighbours, Logistic Regression Accuracy: 79.46, 87.5

LITERATURE SURVEY

Name: College Admission Prediction using Ensemble Machine Learning Models

Year: 2021

Author : Vandit Manish Jain, Rihaan Satia

About: 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 includeMS (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.

Algorithms :Linear Regression,Neural Network,Random Forest Accuracy: 82.12,74.47,79.09

LITERATURE SURVEY

Name: A Comparative Study on University Admission Predictions Using Machine Learning Techniques

Year: 2021

Author : Ankita Chawla

About: In this paper, they reviewed the machine learning techniques which are prevalent and provide accurate predictions regarding university admissions. They have compare different regression models and machine learning methodologies such as,Random Forest, Linear Regression, Stacked Ensemble Learning, Support Vector Regression, Decision Trees, KNN(K-Nearest Neighbor) etc, used by other authors in their works and try to reach on a conclusion as to which technique will provide better accuracy.

Algorithms :Linear Regression, Logistic Regression, Decision Tree, Support Vector Machines SVM), Accuracy:90.8,78.57,89.98

LITERATURE SURVEY

Name: Graduate Admission Prediction Using Machine Learning Techniques

Year: 2021

Author : Sara Alijasmi, Ali buo Nassif, Ismail Shahin, Ashraf M Elanagar

About: .This paper helps us to predict 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.

Algorithms :Linear Regression Accuracy: 93%