

IDEATION PHASE

Literature Survey

Date	29 August 2022
Team ID	PNT2022TMID37486
Project Name	University Admit Eligibility Predictor

PAPER - 1

Title: A University Admission Prediction System using Stacked Ensemble Learning

Author: S. Sridhar, S. Mootha and S. Kolagat

Published year: 2020

Description: For an aspiring graduate student, shortlisting the universities to apply to is a difficult problem. Since an application is extremely dynamic, students often tend to wonder if their profile matches the requirement of a certain university. Moreover, the cost of applying to a university is extremely high making it critical that students shortlist universities based on their profile. A university admission prediction system is quite useful for students to determine their chances of acceptance to a specific university. The system could make use of data related to previous applicants to various universities and their admit or reject status.

PAPER - 2

Title: A Comparison of Regression Models for Prediction of Graduate Admissions, IEEE International Conference on Computational Intelligence in Data Science

Author: S. Mohan Acharya

Published year: 2019

Description: 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. It very assumption (Statistical Distributional Assumptions) heavy.

PAPER - 3

Title: Predicting student university admission using logistic regression

Author: Sharan Kumar Paratala Rajagopal

Published year: 2020

Description: Developed a machine learning model using logistic regression to demonstrate the top contributing scores which helps the student to get the admission into the Master's degree program. The results of this examination appear to indicate that GRE Score, TOEFL Score, University Rating, SOP, LOR, CGPA greatly contribute to the 'Chance of Admit'.

PAPER - 4

Title: Engineering & Technology Admission Analysis And Prediction

Author: Bhoite, Sachin & More, Ajit

Published year: 2020

Description: A Great career without a Great Education is just a DREAM. While we talk about career— a person's degree, specialization, College/University and the knowledge that he possesses – are the key factors. In India the educational pattern is 10+2+3+2 or 10+2+4+2 or 10+2+5.5 & career related decisions are discussed after 10th standard and mostly concluded after 12th. As soon as a student completes his/her Higher Secondary Schooling, the first goal of any student is to get into an appropriate College/University for appropriate course/program so that he can get a better education, guidance & placement for his future. To build predictive model we used Logistic Regression, K Nearest Neighbours', Decision Tree Classifier, Random Forest Classifier, Naive Bayes & Support Vector Machine classifiers then compare the results of cross-validation with & without feature engineering and also

compare the probabilities of getting admission to a college. The performance of various classifiers is described in this paper. It is found that Random Forest & Decision tree classifiers give better accuracy.

PAPER – 5

Title: Student Admission Predictor

Author: Himanshu Sonawane

Published year: 2017

Description: A Student Admission Predictor (SAP) system was developed which will help the students to predict the chances of their application being selected for a particular university based on their profile. Also, the system will provide a recommendation of universities to the student to which the student has a high possibility of getting admission. Multiple machine learning classification algorithms were evaluated to develop the system. Finally, K Nearest Neighbours and Decision Tree algorithms were used as they were found to be the best fit for the system developed.

PAPER - 6

Title: A Recommender System for Predicting Students' Admission to a Graduate Program using Machine Learning Algorithms

Author: Inssaf El Guabassi, Zakaria Bousalem, Rim Marah, Aimad Qazdar

Published year: 2021

Description: Machine Learning regression algorithms like Linear Regression, Decision Tree, Support Vector Regression, and Random Forest Regression were used to build a predictive model for predicting Students' admission in higher education. The parameters used in this study are GRE Score, TOEFL Score, University Rating, SOP, LOR, CGPA, and Research Experience.

PAPER – 7

Title: Universities admissions predictor

Author: Aanchal Thakur

Published year: 2020

Description: An AI based application is developed using linear regression which obtains the user to input their academic data and calculates their chances of admission into the University Tier that they selected. It also provides an analysis of the data and shows how chances of admissions can depend on various factors.

PAPER - 8

Title: Multiple Machine Learning Classifiers for students admission into University

Author: Anil B, Akram Pasha, Aman Kumar Singh, Aditya Kumar Singh

Published year: 2019

Description: This model uses supervised learning classifier models like linear and non-linear algorithm, logistic regression, decision tree, Decision Tree, Naïve Bayes, etc. to classify applications of students for master's Program into 'Accept' and 'Reject'