

LITERATURE SURVY

Many aspiring graduate students want to complete their studies, prepare for the next stage, which is a master's degree. Many of them may wonder about the basic requirements for admission to universities, and about the universities where they can be admitted based on their requirement.

[1].The literature contains several studies that perform statistical analyses on admissions decisions. For example authors in [2], presents an expert system, called PASS, in which Logistic Regression is used to predict the potential of high school students in Greece to pass the national exam for entering higher education institutes. The authors in [3] used predictive modeling to assess admission policies and standards based on features like GPA score, ACT score, residency race, etc. Limitations of this research include not taking into consideration other important factors such as past work experience, technical papers of the students, etc.

These researchers' authors in [4] have used data mining and ML techniques to analyze the current scenario of admission by predicting the enrolment behavior of students. They have used the Apriori technique to analyze the behavior of students who are seeking admission to a particular college. They have also used the Naïve Bayes algorithm which will help students to choose the course and help them in the admission procedure. In their project, they were conducting a test for students who were seeking admissions and then based on their performance, they were suggesting students a course branch using Naïve Bayes Algorithm.

But human intervention was required to make the final decision on the status.[5] roposed a hybrid model of Decision Tree Classifier and Neural Networks that predicts the chances of a student seeking admission in a specific university based on his academic merits and background. The proposed system was tested with the live data of 2400 Macau Secondary School students and considered thirteen attributes such as origin, major, rank in class, grades, etc.[6] designed a framework for predicting a student's admission to a

particular college by using a hybrid combination of Association Rule Mining with Pattern Growth Approach. The attributes of the data source included student details such as name, gender, caste, address, 10th marks, 12th marks, score of Common Entrance Test, name of pre-college, name of admitted college, and branch. Once valid association rules are generated, the prediction is achieved by consequence constraint during the generation of association rules. [7] P.K. Binu et al, proposed a framework for predicting a student's admission chances. The proposed framework has two modules i.e. A Hadoop MapReduce module to store the data and an Artificial Neural Network to predict the chances. The data collected had attributes such as state, rank, board, quota, etc. The system has not made use of academic credentials in predicting. The neural network has two input nodes, one hidden layer with two nodes, and an output layer with two nodes. [8]R. Swaminathan et al , built a graduate recommender system for students aspiring to do their post-graduation in America. Data was scraped from Edulix for a set of 45 universities in the USA. On this scraped data, a feed-forward selection algorithm was run to select the ideal features to build the recommender system. The chosen features were the undergraduate university, GPA, GRE Score, and Research experience. The proposed method used the k-nearest neighbor, Support Vector Machine (SVM) and random forest algorithms to recommend universities. The SVM was the most efficient with 53.4% accuracy. [9] K. Zaamout et al. [11] proposed an ensemble based neural network framework. In this method, individual neural networks are trained and the output of each neural network is combined and used as the input for a larger neural network. By combining the forecast of every individual network, it has the potential to boost the classification of the entire system as a whole. The proposed system was tested against 4 readily available datasets and showed promising results.