LITERATURE SURVEY

1. **COLLEGE ADMISSION PREDICTOR:**

Students can enter their grades and personal information into the College Admission Predictor System, a web-based application system. For many students, the college entrance predictor is a blessing. By determining the cut off, this aids the student in not only completing the application forms but also giving them a general notion of the institution they will go in the future. The system's major objective is to automate organisational processes with better performance in order to fulfil the vision of paperless admission.

https://www.jncet.org/Manuscripts/Volume-8/Issue-4/Vol-8-issue-4-M-32.pdf

2. **GRADUATE ADMISSION PREDICTION USING MACHINE LEARNING:**

The issue of student admittance is crucial for educational institutions. In this study, machine learning algorithms are used to forecast a student's likelihood of admission to a master's degree. Students will benefit from knowing in advance whether they stand a chance of being admitted. Multiple linear regression, k-nearest neighbour, random forest, and multilayer perceptron are the machine learning models. The Multilayer Perceptron model outperforms other models, according to experiments.

Citation: Aljasmi, Sara & Nassif, Ali & Shahin, Ismail & Elnagar, Ashraf. (2020). Graduate Admission Prediction Using Machine Learning. 14. 10.46300/91013.2020.14.13.

https://www.researchgate.net/publication/348433004_Graduate_Admission_Prediction_Using_Machine_Learning

3. **GRADUATE ADMISSION CHANCE PREDICTION USING DEEP NEURAL NETWORK:**

Every year many students apply for graduate admission to different universities. To select an applicant, each university has different selection criteria such as GRE score, CGPA, research background, statement of purpose, letter of recommendation, university rating etc. There are some web applications as well as some consultancy services for suggesting the appropriate university based on students' portfolio. These help to give an idea which universities should be applied for admission. But they have limitations because humans are incapable of considering all the conditions and universities.

Citation: M. Omaer Faruq Goni, A. Matin, T. Hasan, M. Abu Ismail Siddique, O. Jyoti and F. M. Sifnatul Hasnain, "Graduate Admission Chance Prediction Using Deep Neural Network," 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 2020, pp. 259-262, doi: 10.1109/WIECON-ECE52138.2020.9397988.

https://ieeexplore.ieee.org/abstract/document/9397988

4. Graduate University Admission Predictor using Machine Learning:

With the increase in the number of graduates who wish to pursue their education, it has become more challenging to get admission for the students in their dream university. Usually, newly graduate students 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 organisations to help them identify their admission chances. Giving the limited number of universities that can be considered by a human consultant, however, this approach might be bias and inaccurate. Higher education in abroad universities generally means we have many options like Canada, USA, UK Germany, Italy, Australia etc. But we are focusing on only the students who want to do their Masters in America. Students who want to do masters in America have to write GRE (Graduate Records Examination) and TOEFL (Test of English as a Foreign Language). Once they have attended the exams they have to prepare their SOP (statement of purpose) and LOR(letter of recommendation) which are one of the crucial factors they have to consider. These LOR and SOP plays a vital role if the student was looking for any scholarship. Prospective graduate students always face a dilemma deciding universities of their choice while applying to master's programs.

https://www.ijmtst.com/volume6/issue12/92.IJMTST0612246.pdf

5. A Statistical Approach to Graduate Admissions' Chance Prediction:

In the current scenario, grad students often experience difficulty in choosing a proper institution for pursuing masters based on their academic performances. Although there are many consultancy services and Web applications suggesting students, institutions in which they are most likely to get admitted. But, not always the decisions are staunch since there are different kinds of students with different portfolios and performances in their academic careers and institution selection is done on the basis of historical admissions' data. This study aims to analyze a student's academic achievements as well as university rating and give the probability of getting admission in that university, as output. The gradient boosting regressor model is deployed, which accomplished a \({R^2}\)-score of 0.84 eventually surpassing the performance of the state-of-the-art model. In addition to \({R^2}\)-score, other performance error metrics like mean absolute error, mean square error, and root mean square error are computed and showcased.

Citation: Chakrabarty, Navoneel & Chowdhury, Siddhartha & Rana, Srinibas. (2020). A Statistical Approach to Graduate Admissions' Chance Prediction. 10.1007/978-981-15-2043-3_38.

https://www.researchgate.net/publication/339653123_A_Statistical_Approach_to_Graduate_Admissions'_Chance_Prediction