LITERATURE SURVEY

This literature survey on various reference papers was done to present knowledge base for the project University Admit Eligibility Predictor Using Machine Learning. The main aim of this survey was:

1. To collect and analyse existing solutions, research papers, journals, books etc.,
2. To establish theoretical knowledge and framework for the subject area,
3. To find unsolved problems, the drawbacks or limitations of other research work, as a good sources of goals for our research work.
4. To build a strong knowledge base of existing studies, models, case studies, to develop a newer and better solution.

S.NO.	TITLE	AUTHOR(S)	YEAR	TECHNIQUE(S)	FINDINGS/PROS/CONS
01.	Graduate Admission Prediction Using Machine Learning	1. Sara Aljasmi, 2. Ali Bou Nassif, 3. Ismail Shahin, 4. Ashraf Elnagar.	January 2021.	K- Nearest neighbours, Multilayer Perceptron, Multiple linear regression, Random Forest.	01. Reported that the Multilayer Perceptron model surpasses other models, 02. Show that the most important variable is CGPA And the second is GRE. 03. All tests done using R language, models created using Weka, and statistical test performed using PHStat.
02.	Prediction of Graduate Admission using Multiple Supervised Machine Learning Models	1. Zain Bitar, 2. Amjed Al-Mousa.	March 2020	SVM, Logistic Regression, Linear Regression, Decision Trees, and Random Forest.	01. Ensemble methods such as Boosting, bagging and stacking are used to enhance the accuracy for the classifier. 02. Using an Ensemble technique improved the accuracy score to an accuracy of 0.925.
03.	A Statistical Approach to Graduate Admissions' Chance Prediction	1. Navonee Chakrabarty 2. Siddhartha Chowdhury 3. Srinibas Rana	March 2020	Gradient Boosting Regressor R2 score, mean absolute error, Mean square error, Root mean square error.	01. The gradient boosting regressor model accomplished a R2 score of 0.84. 02. Presented deployment of ensemble regression technique, gradient boosting regression which is hyper-parameter tunned using grid search on admission data.
04.	A Comparison of Regression Models for Prediction of Graduate Admissions	4. Mohan S Acharya, 5. Asfia Armaan, 6. Aneeta S Antony.	February 2019	Linear Regression, Support Vector Regression, Decision Trees, Random Forest.	03. Computed error functions for the different models and compared their performance to select the best performing model. 04. MSE and R2 Scores are tabulated for all the models. Linear Regression performs the best on dataset, closely followed by Random Forest. 05. Few outliers have influenced the Linear model to some extent.
05.	College Recommendation System for Admission.	1. Deokate monali, 2. Gholave Dhanashri, 3. Jarad Dipali, 4. Khomane Tejaswini.	Mar-2018	Naive Bayes, Adaboost algorithm.	01. Recommendation system designed on the basis of college NAAC grade, NBA grade, campus placement and review from alumni student. 02. User can choose college on the basis of his priority, near to user location, fees,