

### **Literature Survey**

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| <b>Team ID</b>      | PNT2022TMID21492                       |
| <b>Project name</b> | University Admit Eligibility Predictor |

#### **Team Members:**

19IT021 – Dhanuja V  
19IT029 – Gomathi G(Team Leader)  
19IT048 – Keerthana R  
19IT054 – Manisha M

**Team – Faculty Mentor:** K.Indira

#### **1. Literature Survey – 1:**

Link:

[https://www.researchgate.net/publication/348433004 Graduate Admission Prediction Using Machine Learning](https://www.researchgate.net/publication/348433004_Graduate_Admission_Prediction_Using_Machine_Learning)

| <b>Author Name</b>   | <b>Title of the Paper</b>                            | <b>Publication Year</b> | <b>Description</b>   | <b>Advantage</b>   |
|--|--|-------------------------|--|--|
| Sara Aljasmi, Ali Bou Nassif, Ismail Shahin, Ashraf Elnagar. | Graduate Admission Prediction Using Machine Learning | 2020                    | Student admission problem is very important in educational institutions. 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 included are multiple linear regression, k-nearest neighbor, random forest, and Multilayer Perceptron. Experiments show that the Multilayer Perceptron model surpasses other models. |

## 2. Literature Survey – 2:

Link:

<https://www.eajournals.org/wp-content/uploads/Predicting-Student-University-Admission-Using-Logistic-Regression.pdf>

| Author Name                    | Title of the Paper  | Publication Year | Description   | Advantage   |
|--------------------------------|---|------------------|---|---|
| Sharan Kumar Paratala Rajagopa | Predicting Student University Admission Using Logistic Regression | 2020             | The primary purpose is to discuss the prediction of student admission to university based on numerous factors and using logistic regression. The admission decision depends on criteria within the particular college or degree program. The independent variables in this study will be measured statistically to predict graduate school admission. | This model would likely be greatly improved by the gathering of additional data of students from different universities which has similar selection criteria to choose the candidates for Master's program. |

## 3. Literature Survey – 3:

Link: <https://towardsdatascience.com/introduction-to-modelling-tabular-data-predicting-a-students-chance-of-gaining-admission-using-ml-3a440f709c71>

| Author Name     | Title of the Paper  | Publication Year | Description  | Advantage   |
|-----------------|---|------------------|--|---|
| <u>Jia Qing</u> | Introduction to Modelling Tabular Data: Predicting a student's chance of gaining admission using ML | 2021             | The objective of this analysis is to explore the most important factors for a student to get into graduate school and to select the most accurate model to predict a student's chances of gaining admission into Graduate school | Linear regression seems to perform the best compared to the neural net and the random forest which proves that complicated models doesn't always produce better results. ensembling the models produced a better result |

#### 4. Literature Survey – 4:

Link: <https://ieeexplore.ieee.org/document/6416521>

| Author Name   | Title of the Paper   | Publication Year | Description   | Advantage  |
|---|--|------------------|---|--|
| <u>Abdul Hamid M Ragab, Abdul Fatah S. Mashat, Ahmed M Khedra</u> | HRSPCA: Hybrid Recommender system for predicting college admission | 2012             | This paper presents a new college admission system using hybrid recommender based on data mining techniques and knowledge discovery rules, for tackling college admissions prediction problems. This is due to the huge numbers of students required to attend university colleges every year. The proposed HRSPCA system consists of two cascaded hybrid recommenders working together with the help of college predictor, for achieving high performance. | High prediction accuracy rate, flexibility is an advantage, as the system can predict suitable colleges that match the students' profiles and the suitable track channels through which the students are advised to enter. The system is adaptive, since it can be tuned up with other decision makers attributes performing trusted needed tasks faster and fairly. |