# Ideation Phase

# Literature Survey

| Date | 4 October 2022 |
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| Team ID | PNT2022TMID12009 |
| Project Name | Project - University Admit Eligibility Predictor |

## Introduction:

In today's world many students are often worried about their chances of admission to University. The main moto of the project is help students to short listing universities withtheir marks. The predicted output gives them a fair idea about their admission chances in a particular university. This analysis should also help students who are currently preparing or will be preparing to get a better idea.

Given certain metrics of a student, our task is to predict the probability of the student getting accepted into graduate programs. Statistically, we have seen many students pursue their education away from their native countries. Generally, as the students don't have much of an idea about the procedures, requirements, and details of the universities, they seek help from education consultancy firms to help them successfully secure admission to the universities which are best suitable for their profiles. For this, they have to invest huge amounts of money in consultancy fees. The aim of this research is to develop a system using Applied Data Science.

University prediction would be the easiest mode to predict the university/college person is applicable for as well as it would be unbiased and totally transparent. Individually would no more need to depend upon the consultancies who may be slightly deviated from the list of colleges/universities that may be having contracts with them. Moreover, applying to only colleges/universities where the student has a genuine chance would reduce the application process. Additionally, living expense of the area where colleges/university is located would also be provided on the website.

## Objective:

- College Admission Predictor System is a web based application system in which students can register their marks. This helps to predict their admissions in colleges.

- Using this Application, the entrance seat allotment becomes easier and efficient. The total time for the entrance allotment becomes lower and the allotment process becomes faster.

- It helps students to make right decisions for choosing their college.

- In which students can register with their marks details to prediction the admission in colleges. It helps student for making decision for choosing a right college.

**Literature Survey - 1:**

        **TOPIC**       **:** PREDICTION FOR UNIVERSITY ADMISSION USING MACHINELEARNING

        **AUTHOR**     **:** Chithara Apoorva D A

## Overview:

- Students who want to do masters in America have to write GRE and TOEFL/IELTS. Once they have attended the exams they have to prepare their SOP and LOR which are one of the crucial factors they have to consider. These LOR and SOP play a vital role if the student was looking for any scholarship.

## Advantages:

- Give more accurate options for foreign universities.
- Train more quickly, especially with bigger datasets.

## Disadvantages:

- Models, particularly those trained on CPUs, may  be  computationally costly and time-consuming.

# Literature Survey – 2:

**TOPIC** : GRADE: MACHINE LEARNING SUPPOURT FOR GRADUATEADMISSIONS

**AUTHOR** : Austin Waters

## Overview:

- Waters and Mikkulainen proposed an astounding that asides in posting affirmation application as per the degree of acknowledgement and upgrades the presentation of inspecting applications utilizing measurable AI.

## Advantages:

- GRADE has minimal software and hardware dependencies.
- It is implemented in Python with the Pandas and Skit-learn packages,which are open source and freely available.

## Disadvantages:

- It is used to display the result as a dotted graph.
- It is to predict the approximate value.

## Literature Survey - 3:

**TOPIC** : PREDICTING UNDERGRADUATE ADMISSION

**AUTHOR** : Md. Portiku Zaman

## Overview:

- Here, the authors apply three machine learning algorithms XGBoost, lightGBM, and GBM on a collected dataset to estimate the probability of getting admission to the university after attending or before attending the admission test.

## Advantages:

- Easy to implement evaluation of the conditional probability is simple.
- Individuals would no longer need to rely on consultancies that may have contracts with schools and universities that are somewhat off the list.

## Disadvantages:

- It is not always true that the conditional independence assumption is true. The feature often exhibits some sort of dependence.

# Literature Survey – 4:

**TOPIC** : GRATUATE ADMISSION PREDICTION USING MACHINELEARNING

**AUTHOR** : Sara Aljasami

## Overview:

- This will assist students to know in advance if they have a chance toget accepted. The machine learning models are multiple linear regression, K-nearest neighbour, random forest, and multilayer perceptron.

## Advantages:

- It uses many algorithms like random forest, K-nearest neighbour, multilayer preceptron.
- The simplest way to determine whether a person is eligible for auniversity or college as well as being completely objective and transparent.

## Disadvantages:

- Contrarily, linear regression presumes that the relationship between thedependent and independent variables is linear. The implies that it considers their relationship to be linear. The independence of the qualities is assumed.

**References:**

| S.NO | JOURNAL TITLE | FIRST AUTHOR | CITATION |
|------|---------------|--------------|----------|
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