# **PROPOSED SOLUTION**

**DOMAIN** : Applied Data Science

**PROBLEM STATEMENT**: University Admit Eligibility Predictor

**TEAM ID** : PNT2022TMID32493

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#### UNIVERSITY ADMIT ELIGIBILITY PREDICTOR:

## **PROBLEM STATEMENT:**

University and college admission is a complex decision process that goes beyond simply matching test scores and admission requirements. For an aspiring graduate student, choosing which universities to apply to is really a difficult problem. Often, the students wonder if their profile is good enough for a certain university. The aim of this project is to help students in shortlisting universities with their profiles. The predicted output gives them a fair idea about their admission chances in a particular university. There are different college prediction apps and websites being maintained contemporarily, but using them is tedious to some extent, due to the lack of articulate information regarding colleges, and the time consumed in searching the best deserving college. The problem statement, hence being tackled, is to design a college prediction/prediction system

#### **IDEA/SOLUTION DESCRIPTION:**

In this project, this problem has been addressed by modelling an AI based application that asks for the users to input their academic transcripts data and calculates their chances of admission into the University Tier that they selected. It also provides an analysis of the data and shows how chances of admissions can depend on various factors. College Admission Predictor System is a web based application system in which students can register their marks along with their personal information. This helps to predict their admissions in colleges. 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. This analysis should also help students who are currently preparing or will be preparing to get a better idea.

## **NOVELTY/UNIQUENESS:**

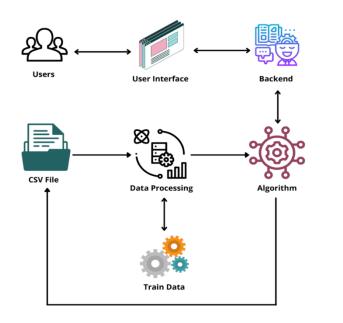
The following below explains the uniqueness if our predictor application:

- 1.**Data Preparation**: It is referred to as "data pre-processing". It represents one of the most crucial steps in all Machine Learning projects because it involves data collection, formatting data, Improving data quality, feature engineering, and labelling
- 2.**Modelling**: This step involves the conception of different Machine Learning algorithm (e.g., regression, classification, clustering, etc.) that can be used for predicting university admission.
- 3. **Machine Learning Algorithms**: It represents the algorithms used to build our predictive model, which are Linear Regression (LR), Decision Tree (DT), Support Vector Regression (SVR), and Random Forest Regression (RFR).
- 4.**Evaluation**: This step is a core part of building our Machine Learning model. There are different metrics of evaluations that can be used. The evaluation metrics used in this research work are Mean Square Error, Root Mean Square Error, and R-squared.
- 5.**Deployment & Integration**: It is all of the tasks that make our predictor application available for all to use.

## **SOCIAL IMPACT/CUSTOMER SATISFICATION:**

This project University Admission Eligibility Predictor System is a web-based application in which students can register with their personal as well as marks details to predict the admission in universities. The dataset contains information on the student profile and the university details with a field detailing if the admission was positive or not. The problem statement, hence being tackled, is to design a college prediction/prediction system and to provide a probabilistic insight into college administration for overall rating, cut-offs of the colleges, admission intake and preferences of students. Also, it helps students avoid spending time and money on counsellor and stressful research related to finding a suitable college.

## **BUSINESS MODEL:**



To make this prediction software popular and to increase the profit in business point-of-view, the following are need to be considered:

- Harnessing Student Motivation.
- Reducing Response Time through Automation.
- Dynamic Engagement Strategies.
- Leverage Technology.
- Mobile Application Process.
- Do More with Enrolment Analytics

## **SCALABILITY OF SOLUTION:**

The system shall be completely operational all hours of the day unless system failure or upgradation work is to be performed. Down time after a failure shall not exceed 24 hours, No training is required to use the website. The system can support any number of users at a time. The system shall provide password protected access to the website to all users – students and admins both. The system shall provide a web page that explains how to navigate the site. This page should be customized based on what pages that user is allowed to access.