Project 1

University Admission Prediction Using Multiple Linear Regression

In this project, you will train regression models to find the probability of a student getting accepted into a particular university based on their profile.

This project could be practically used to get the university acceptance rate for individual students using web application.

Train Artificial Neural Network models to perform regression tasks

Perform exploratory data analysis

Understand the theory and intuition behind regression models and train them in Scikit Learn

Understand the difference between various regression models KPIs such as MSE, RMSE, MAE, R2, adjusted R2

Dataset:

This dataset was built with the purpose of helping students in shortlisting universities with their profiles and it contains several parameters that are considered important during the application for master programs. The predicted output gives them a far idea about their chances for a particular university.

Steps to follow:

1. Understand the problem statement
2. Import libraries and datasets
3. Perform Exploratory Data Analysis
4. Perform Data Visualization
5. Create Training and Testing Datasets
6. Train and evaluate a linear regression model
7. Train and evaluate an artificial neural networks model
8. Train and Evaluate a Random Forest Regressor and Decision Tree Model
9. Understand the various regression KPIs
10. Calculate and Print Regression model KPIs