



# University Recommender System

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## Introduction

High-quality recommender systems are the main drivers for success of many online services. The rating parameter in Yelp is a critical parameter in determining whether a user will click to know more. In fact, a Harvard study states "a one star increase in Yelp rating leads to a 5-9% increase in revenue." Hence it is apparent why there is such a strong commercial incentive for good user recommender systems. They have a direct impact on a growing number of businesses.

For the aspirants of higher education, shortlisting universities that best suits their profile is a cumbersome process, hence they go to the third parties like consultancies which encash on a student's passion for higher studies and yet not guarantee an admit.

We propose a way to recommend universities based on the user's profile and his preferences which can likely increase his chance of getting an admit and avoid investing huge amount in the third parties.

To develop a predictive admit in a university model using the principles of a recommender system our goal is to collect data from the appropriate sources and evaluate the predictive performance of various collaborative filtering techniques on this data set.

This proposal will take on the following structure:

- Motivation behind University recommendation systems.
- Short description of what this project will achieve.
- Project Details
- Conclusion

## Motivation

Higher education is provided by universities, colleges, and other institutions that award academic degrees. Theoretically, it will also enable individuals to expand their knowledge and skills, and increase their understanding of the world and their community. According to the sources, higher education offers graduates more jobs to choose from than are open to those who don't pursue education beyond high school. Given the reasons for higher education, statistics show that there is a monotonic increase in interest in pursuing higher education. There are close to 25000+ universities in the world that offer higher education, making a choice is an obvious reason for a student to worry about.

Identifying the predictors which will result in an admit, and filtering based on the predictors will narrow down the choices and increase the probability of an admit.

## Project Summary

The University Recommender System will suggest a list of universities to the user based on his possibilities of getting an admit, the prediction is done using the data collected from the students from various universities.

## Project Details

### *Architecture and Environment*

- The system uses collaborative filtering which is a recommendation system strategy. This is a software application developed using Java, JavaScript, node.js

### *Implementation Issues and Challenges*

- The data is acquired from the students, collecting genuine data is an issue.
- Validation systems is used to check for the pure data dynamically.
- This is a unique product in the way that it offers:
  1. Transparent and valid results
  2. First hand advising. Better than a third person (consultancy)
  3. Security from fraudulent consultancy

### *Deliverables*

- This product will produce a reliable recommender system for the students.
- Good predictive model that gives accurate results on the test data.

## Conclusion

University Recommender System helps the user make informed choices.