University Admit Eligibility Predictor:

Problem Statement:

In todays era we see a lot of students pursuing their education away from their home countries. The main country targeted by these international students is The United States of America. Majority of the international students in the United States of America are from India and China. In the past decade the number of Indian students pursuing post graduate education from the USA has rapidly increased. With the increase in the number of international students studying in the USA, each applicant has to face a tough competition to get admission in their dream university. Generally as the students dont have much idea about the procedures, requirements and details of the universities in the USA they seek help from the education consultancy firms to help them successfully secure admission in the universities which are best suitable for their profile, for this they have to invest huge amount of money as consultancy fees. Apart from these the education consultancy firms there are few websites and blogs that guide the students on the admission procedures. The drawback of the currently available resources is that they are very limited and also they are not truly dependable taking into consideration of their accuracy and reliability. The aim of this research is to develop a system using machine learning algorithms, we will name it as Student Admission Predictor (SAP). It will help the students to identify the chances of their application to an university being accepted. Also it will help them in identifying the universities which are best suitable for their profile and also provide them with the details of those universities. A simple user interface will be developed for the users to access the SAP system. Keywords: Student Admission Predictor; Machine Learning; Data Mining.

A persons education plays a vital role in their life. While planning for education students often have several questions regarding the courses, universities, job opportunities, expenses involved, etc. Securing admission in their dream university is one of their main concerns. It is seen that often students prefer to pursue their education from universities which have global recognition. And when it comes to international students the first choice of the majority of them is the United States of America. With the majority of worlds highly reputed universities, wide range of courses offered in every sector, highly accredited education system and teaching, scholarships provided to students, best job market and many more advantages make it the dream destination for the international 1 students. According to research, there are above 8 Million international students studying in more than 1700 public and 2500 private

universities and colleges across the USA. (MasterPortal (2017)) The majority of international students studying in the USA are from India and China. In the past decade, India has seen a huge increase in the number of students opting to pursue their education from foreign universities in countries like The USA, Ireland, Australia, Germany, etc. Although there are significant universities and colleges in India, students are finding it difficult to get admission in the highly ranked colleges and also getting a job is a challenge as the ratio of number students to the number work opportunities available is quite high. India is one of the leading counties in the number of software engineers produced each year; it becomes tough for the students to find jobs in elite companies due to high competition. This motivates a good number of students to pursue post-graduation in their field. It is seen that the number of students pursuing Masters in Computer Science field from universities in the USA is quite high; the focus of this research will be on these students. (Times (2015)) Majority of universities in the USA follow similar guidelines for providing admission to students. Universities take into consideration different factors like score on aptitude based examination like the General Record Examination (GRE), command over the English language is judged based on their score in English competency test like Test Of English as a Foreign Language (TOEFL) OR International English Language Testing System (IELTS), their work experience in same or other fields, the quality of the Letters Of Recommendation (LOR) and the Statement Of Purpose documents provided by the student etc. Based on the overall profile of the student decision is taken by the universities admission team to admit or reject a particular candidate. Every candidate has to take all the required examination and build a strong profile to secure admission in their dream universities in the USA. Once the candidates have made their profile ready, they apply to the universities where they aim to secure admission. The students have to shortlist the universities which are best known for the courses they are looking for and also they should have an idea about their chances of securing admission in those universities based on their profile. This task of shortlisting the universities where the student has high chances of admission is difficult for mainly for the international students, so they end up with applying to many universities in hopes of getting admission in few of them thus investing an extra amount of money in the applications. There are several portals and websites which provide information and help to students in shortlisting the universities, but they are not reliable. Most of the students dont take the risk of evaluating the colleges by themselves, and they seek the help of the education consultancy firms to do it for them. Again for this students have to pay a huge amount of fee to the education consultant. The primary objective of this research is to develop a system to solve the problems the international students

are facing while applying for universities in the USA. We will be developing a Student Admission Predictor (SAP) system which will help the students to predict the chances of their application being selected for a particular university for which they wish to apply based on their profile. Also, the system will provide a recommendation of universities to the student to which the student has a high possibility of getting admission. Multiple machine learning classification algorithms were evaluated to develop the system. Finally, K Nearest Neighbours and Decision Tree algorithms were used as they were found to be the best fit for the system developed. Also, we will be creating a simple user interface which will help the users to input the data related to student profile and get the predicted result for the application based on the profile as output. This research will thus eventually help students saving the extra amount of time and money they have to spend at the education consultancy firms. And also it will help them to limit their number of application to a small number by proving them the suggestion of the universities where they have the best chance of securing admission thus saving more money on the application fees.