Data Mining for Students' Employability Prediction

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Declaration

We declare that this thesis is our own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is provided.

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Abstract

Assessing student employability enables a method of integrating student abilities and organizations requirements, which is an important aspect for educational institutions. Improving student-evaluation techniques for employability will assist students to have a better knowledge of business organizations and find the right career for them. As a result, improved student employability prediction can assist students in matching their desirability to company requirements and fitting the employment profile of the firm for which they are searching.

The data is gathered through a survey in which students are asked to fill out a questionnaire in which they may indicate their abilities and academic achievement. This information may be used to determine their competency in a variety of skill categories, including soft skills, problem-solving skills and technical abilities and so on.

Data mining has been used in a variety of fields to efficiently assess large volumes of data. The aim of this study to predict student employability by considering different factors such as skills that the students have gained during their diploma level and time duration with respect to the knowledge they have captured when they expect the placement at the end of graduation by using the data mining techniques. Further during this research most specific skills with relevant to each job category also was identified.

In this research for the prediction of the student employability Rapid Miner software has used and different data mining models such as such as KNN, Naive Bayer's, and Decision Tree were evaluated based on classification techniques. The best model was identified among these models for this institute's student's employability prediction. Further associated technique has been used to identify the most associated skills with respect to each job category. So in this research classification and association techniques were used and evaluated. This study will be expanded to get more data by using a qualitative research, and further the employer's aspects of employability will also consider.

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