RESULT PREDICTOR - SUGGESTION OF PROJECTED O/L RESULTS USING A MACHINE LEARNING APPROACH

Dilan Ganeshan

A dissertation submitted in partial fulfilment of the requirement for Bachelor of Engineering (Honours) degree in Software Engineering

Department of Computing

Informatics Institute of Technology, Sri Lanka

In collaboration with

University of Westminster, UK

2020

Abstract

Academic success is being used to evaluate how the academic objectives of teachers, graduates and organization of education have been met. This is one of the main aspects determining educational quality. The key problem raised by this study is to classify an at risk student as early as possible. The recognition is based on considerations such as health condition of the pupils, participation, spare time, intimate relationships etc. Because it has to be performed individually, it is rather time-consuming and laborious to each individual child. To accelerate this method, we suggest an effective predictive method.

The issue was then split into two principal parts. First, to define variables that influence results and, second, to evaluate the right algorithm for predicting outcomes for machine learning. Within this study, the role of defining variables is conducted with filtering strategies from 3 major areas, analysis into current structures, survey and machine learning apps. Before that, as per a recent analysis and the current method, the learning of the regression method is defined as the appropriate path to machine learning to tackle the technological issue.

Therefore, they established the 3 crucial factors. Previous term marks, attendance and teachers feedback. The model's accuracy was 91.61%. The overall findings from domain and business experts on the grade prediction method is good. For the regression model, few technology specialists proposed suitable methods that could be used as potential improvements.