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Automated prediction of computer specification for university students

Senarathna G.P.R.L.[1*], Prabuddhi W.A.M.[1]

[1]*Department of Information and Communication Technology, Faculty of Technology, University of Ruhuna, Karagoda Uyangoda, Kamburupitiya, Matara, Sri Lanka.*

Undergraduates need a laptop computer for their academic program. Most of the students tend to buy a laptop/computer for their higher studies as it becomes an essential device for the education. However, when buying these devices, they do not have a good knowledge of its specifications and then the students have to upgrade the devices in the middle of their academic programs as these devices do not fit with their needs. The present study attempts to investigate the specification of a computer for students who await university entrance according to their department. It is expected that this will help the student to buy a computer which can be used throughout their university life This is because, the specifications and performances of laptops/computers change according to the academic stream the students get selected. The most suitable model for this research is random forest classifier as it shows the highest accuracy level (84%) among other supervised learning techniques and a dataset with more than 800 samples was separated into two-parts called test set and training set. 20% of data was taken as test data set and other data was considered as the training set because then performance of the model can be enhanced. This research is to predict the specification of a computer for university selected students according to their degree in technology stream.

Keywords: Machine Learning

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*Corresponding author: ravindulakshitha97@gmail.com