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| Title | An Extensive Analysis on Computing Students' Academic Performance in Online Environment using Decision Tree | | |
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| Abstract |  |
| Maintaining the continuation of study is a vital element as it holds students' concentration to achieve what the external world left them to explore. COVID-19 acts as some kind of a barrier in front of this continuation of study. Online education lifts this barrier and gives the students a free open road to roam around. But to be sure that students are maintaining the pace and continuing their sturdy approach to achieve their goals, there has to be some monitoring. Educational Data Mining (EDM) is a new discipline that arose from applying data mining techniques to educational data. EDM can be used to understand students and their learning environments better, improve teaching support, and make decisions in educational systems. The main objective of this paper is to analyze the factors that have a profound impact on students' academic performance while conducting EDM applications, more specifically using decision trees. Four distinct datasets are derived from X University students' academic marks in four different undergraduate program courses during an online semester. The decision trees' knowledge reveals critical factors in analyzing students' performance. The findings of this paper will help educators develop new strategies to cope with various challenges and ultimately the betterment of education. | |