

Analysis on Cyber Security Learning course

Mayank Baraskar

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Abstract

This study uses the CRISP-DM (Cross-Industry Standard Process for Data Mining) methodology and R to analyze a Massive Open Online Course (MOOC) on cyber security for the year 2018. Massive open online courses (MOOCs) have been widely employed in the field of education and have lately been promoted as a result of the COVID-19 epidemic. The primary goal of this research is to determine why enrolment in the course has decreased by examining their interactions as well as the completion rate of the course work. The intention of this study is to better understand why students drop out of class and, as a result, improve the course process for the benefit of both students and professors. It is well established that different learners use learning materials in different ways. Some students, for example, tend to complete their course work, whereas others attempt to learn crucial concepts from the entire course work and abandon the rest. This study, on the other hand, can be utilized to figure out the most prevalent student learning patterns and reasons for dropping out. The study was conducted using data from students who enrolled in the Cyber Security online course in 2018. The course was offered in three distinct intakes during the year, in February, June, and September. The goal is to improve the course work for future intakes with the help of visualization of this analysis so that students can get better quality material and presentation of total course work with a lower leaving rate.

References

- Preidys, S.; Sakalauskas, L. 2010. Analysis of students' study activities in virtual learning environments using data mining methods, *Technological and Economic Development of Economy* 16(1): 94–108.