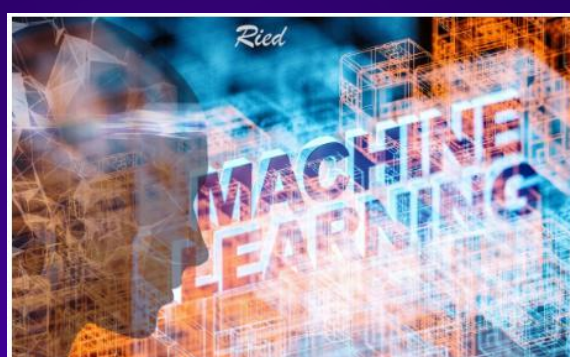


Techniques and applications of Machine Learning and Artificial Intelligence in education: a systematic review

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Machine Learning

Machine Learning is a field of artificial intelligence that is impacting lately in all areas of knowledge.



Review

The areas of social sciences, especially education, is not stranger to it, therefore, a systematic review of the literature on those techniques and applications of Machine Learning and artificial intelligence in Education is performed.

Ignorance

The lack of knowledge and skills of educators in Machine Learning and artificial intelligence limits the optimal implementation of these technologies in education.



Aim

The objective of this work is to identify opportunities for improving teaching-learning processes and educational management at all levels of the educational context through the application of Machine Learning and artificial intelligence.

Databases

The databases used for the bibliographic search were Web of Science and Scopus, the methodology applied is based on the PRISMA statement for obtaining and analyzing 55 articles published in high impact journals between the years 2021-2023.



Results

The results showed that the studies addressed a total of 33 Machine Learning and artificial intelligence techniques and multiple applications that were implemented in educational contexts at primary, secondary and higher education levels in 38 countries.



Conclusions

The conclusions showed the strong impact of the use of Machine Learning and artificial intelligence. This impact is reflected in the use of different intelligent techniques in educational contexts and the increase of research in secondary schools on artificial.

