

A Modular Framework for Enabling Analysis for Educators with Different Levels of Data Mining Skills

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Abstract : Enabling data mining analysis among a wider audience of educators is an active area of research within the educational data mining (EDM) community. The paper proposes a framework for developing an environment that caters for educators who have little technical data mining skills as well as for more advanced users with some data mining expertise. This framework architecture was developed through the review of the strengths and weaknesses of existing models in the literature. The proposed framework provides a modular architecture for future researchers to focus on the development of specific areas within the EDM process. Finally, the paper also highlights a strategy of enabling analysis through either the use of predefined questions or a guided data mining process and highlights how the developed questions and analysis conducted can be reused and extended over time.

Keywords : educational data mining, learning management system, learning analytics, EDM framework

Conference Title : ICEDM 2018 : International Conference on Educational Data Mining

Conference Location : Copenhagen, Denmark

Conference Dates : June 11-12, 2018