

An Ontology for Smart Learning Environments in Music Education

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Abstract : Nowadays, despite the great advances in technology, most educational frameworks lack a strong educational design basis. E-learning has become prevalent, but it faces various challenges such as student isolation and lack of quality in the learning process. An intelligent learning system provides a student with educational material according to their learning background and learning preferences. It records full information about the student, such as demographic information, learning styles, and academic performance. This information allows the system to be fully adapted to the student's needs. In this paper, we propose a framework and an ontology for music education, consisting of the learner model and all elements of the learning process (learning objects, teaching methods, learning activities, assessment). This framework can be integrated into an intelligent learning system and used for music education in schools for the development of professional skills and beyond.

Keywords : intelligent learning systems, e-learning, music education, ontology, semantic web

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