

An affective tutoring system for Massive Open Online Courses

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Abstract. In the last years, the concept of Massive Open Online Course (MOOC) is widely regarded as new, innovative and creative model for online teaching with the advantages of low cost and unlimited participation as well as open access via the web. On the other hand, the intelligent tutoring systems (ITS) have been developed to support one of the most successful educational forms “individual teaching”. Recent researches demonstrate that emotions can influence human behavior and learning, as a result, a new generation of ITS is born, that is Affective Tutoring System (ATS). However, the use of ATS in MOOCs is still unexplored and challenging. Therefore, in this paper we propose a new approach for developing an affective tutoring system for the MOOCs, which is called ATS-MOOCs. Such system can easily help students to improve their learning performance by recognizing their affective states and then adapting the MOOC content accordingly. The proposed approach was implemented and tested in a case study on the MOOC.

Keywords: MOOC, Affective tutoring System, intelligent tutoring system, emotion detection, facial expression, emotional awareness.