Abstract

This paper provides interested beginners with an updated and detailed introduction to the field of Intelligent Tutoring Systems (ITS). ITSs are computer programs that use artificial intelligence techniques to enhance and personalize automation in teaching. This paper is a literature review that provides the following: First, a review of the history of ITS along with a discussion on the interface between human learning and computer tutors and how effective ITSs are in contemporary education. Second, the traditional architectural components of an ITS and their functions are discussed along with approaches taken by various ITSs. Finally, recent innovative ideas in ITS systems are presented. This paper concludes with some of the author’s views regarding future work in the field of intelligent tutoring systems.

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Keywords

Tutoring systems, intelligent tutoring systems, artificial intelligence