



Special Track on

Intelligent Tutoring Systems

Researchers in the field of intelligent tutoring systems (ITS) seek to create computerized tutors that can rival the learning gains produced by human tutoring, the most effective form of instruction known. The goal of the researchers is to produce ITS that provide flexible, efficient, individualized instruction to every student. Pursuit of this common goal has led them to examine many different aspects of how students learn from tutors, how human tutors interact with their students, and how students learn in collaborative environments. Insights from those studies have informed further research into ways that computer systems can detect and respond to student knowledge gaps, misconceptions, affective states and other attributes. This research has produced important work in student modeling, knowledge representation, dialog systems, and authoring tools for efficiently creating ITS in new domains.

The Intelligent Tutoring Systems track at FLAIRS-22 promotes this research agenda by inviting papers which apply modern AI techniques to problems of education. Topics included, but were not limited to, game-based, narrative-based and virtual learning environments; NLP and dialogue in tutoring systems; modeling and shaping the student's affective state; metacognition; gaming the system; ill-defined domains; educational data mining; web-based systems; authoring tools for nonexperts; adaptive educational hypermedia; collaborative and group learning; open learner modeling; ontology engineering for educational purposes; and novel interfaces.

The invited speaker for the Intelligent Tutoring Systems track is Vincent Aleven, Human-Computer Interaction Institute, Carnegie Mellon University.