Special Track on

Intelligent Tutoring Systems

Researchers in the field of Intelligent Tutoring Systems (ITS) seek to create computerized tutors that can rival the large learning gains produced by human tutors. Their goal is to produce ITSs 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 ITSs in new domains, among other areas.

The intelligent tutoring systems track at FLAIRS-21 contributes to this research agenda by inviting papers from, but not limited to, the following areas: game-based, narrative-based and virtual learning environments; NLP and dialog in tutoring systems; modeling and shaping the student's affective state; metacognition; gaming the system; ill-defined domains; educational data mining; authoring tools for nonexperts; adaptive educational hypermedia; collaborative and group learning; open learner modeling; ontology engineering for educational purposes; and novel interfaces. Accepted papers include work in understanding students’ natural language answers, assessing student understanding, diagnosing errors in problem solving, authoring ITS content, and knowledge representation for ill-defined domains.

Invited Speaker

Kevin D. Ashley (Learning Research and Development Center, University of Pittsburgh) will deliver an invited talk on “Some Thoughts on Using Computers to Teach Argumentation.”