



Intelligent Tutoring Systems

Research on intelligent tutoring systems (ITS) involves the application of the techniques of AI to the problems of education. Over the years, researchers have keyed in on nearly every aspect of the endeavor of human tutoring including instructional modeling, feedback planning, student modeling, expert modeling, dialogue strategies, and so on. More recently, researchers have turned their sites on new problems, such as opening up ITS creation to non-AI experts (that is, the authoring problem), tutoring in high-fidelity simulations, spoken dialogue, and applying advanced AI techniques in new ways (such as abductive theorem proving for analysis of essays), to name only a few. The special track on ITS was created to provide researchers a chance to publish and present their work in an extended, specialized session, but also to the larger AI community. The track papers cover several critical areas of current ITS research: modern authoring systems that ease the burden of building ITSs and expert models, novel approaches to classic problems— student modeling and diagnosis, and dialogue-based tutoring with both machine and human tutors.