The goal of the Adaptive Instructional Systems (AIS) Conference, affiliated to the HCI International conference, is to understand the theory and enhance the state-of-practice for a set of technologies (tools and methods) called adaptive instructional systems. Users interact with AIS technologies that guide instructional experiences by tailoring feedback and recommendations based on real-time models of individual learners or teams in the context of domain learning objectives. The focus of this conference on instructional tailoring highlights the importance of accurately modeling learners to accelerate their learning, boost the effectiveness of AIS-based experiences, and to precisely reflect their long term competence in a variety of domains of instruction.

The conference examines modeling, interaction design and standards to facilitate research and development of effective and efficient learning using AISs. Participants in the AIS conference explore machine-based instruction including aspects of adaptation, augmentation, and interaction design. They share their visions and findings about AIS technologies (e.g. intelligent tutoring systems, intelligent mentors, and personal assistants for learning) and propose standards to improve the portability, extensibility, and interoperability of AIS technologies with each other and other instructional technologies.

Another goal is to identify standards for authoring, delivery, interaction design, real-time management, and evaluation of AIS technologies supporting domain classifications: cognitive, affective, psychomotor, and group instruction.

The related topics include, but are not limited to:
- Instructional Theories Applied to Adaptive Instruction
- Methods of Adaptation for Individual Learners and Teams
- Assessment of Learner and Team States for Adaptive Instructional Decisions
- Role of Artificial Intelligence in Adaptive Instruction
- Authoring Adaptive Instructional Systems for Cognitive, Affective, Psychomotor, and Group Tasks
- Interaction Design for Adaptive Instructional Systems
- Conceptual Models and Interoperability Standards for Adaptive Instructional Systems
- Augmentation Technologies (Tools and Methods) for Adaptive Instruction
- Evaluating the Effectiveness of Adaptive Instructional Systems

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