



## Special Track on *Intelligent Learning Technologies*

Intelligent learning technologies (ILT) include a diverse array of computer-based systems and tools designed to foster meaningful student learning. These technologies are intelligent to the extent they implement artificial intelligence principles and techniques to create teachable structure from content, analyze and model inputs from the learner, and generate personalized and adaptive feedback and guidance. Intelligent tutoring systems (ITSs) represent a classic example. ITSs, broadly defined, possess an outer loop that intelligently selects the next relevant task, or content object, for learners to complete based on prior performance, and an inner loop that provides iterative and intelligent feedback as learners work toward completing their tasks. However, intelligent learning technologies encompass more than just intelligent tutors. Increasingly, educational games, automated writing evaluation, virtual pedagogical agents, simulations, virtual worlds, open-ended problem solving, generative concept maps, AI-assisted authoring systems, learning content aggregation programs, and e-textbooks rely on some form of artificial intelligence to enrich the learning experience.

– Benjamin Nye, Stephen Fancsali