

Supporting Learning through Intelligent and Socially Informed Technology

http://hcs.science.uva.nl/AIED2005/

Tutorial at AIED 2005 – T3

Rapid development of computer-based tutors with the Cognitive Tutor Authoring Tools (CTAT)

Abstract

The use of authoring tools to make the development of intelligent tutors easier and more efficient is an on-going and important topic within the AI & Ed community. This tutorial provides hands-on experience with one particular tool suite, the Cognitive Tutor Authoring Tools (CTAT). These tools support the development and delivery (including web delivery) of two types of tutors: problem-specific Pseudo Tutors, which are very easy to build, and Cognitive Tutors, which are harder to build but more general, having a cognitive model of a competent student's skills. Cognitive Tutors have a long and successful track record: they are currently in use in over 2000 US high schools. The CTAT tools are based on techniques of programming by demonstration and machine learning. The tutorial will provide a combination of lectures, demonstrations, and a good amount of hands-on work with the CTAT tool suite. CTAT is available for free for research and educational purposes (see http://ctat.pact.cs.cmu.edu).

Audience

The target audience includes:

- 1. ITS Researchers and developers looking for better authoring tools
- 2. Educators (e.g., college level professors) with some technical background interested in developing on-line exercises for their courses
- 3. Researchers in education or educational technology interested in using tutoring systems as a research platform to explore hypotheses about learning and/or instruction.

Presenters

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