
by Robert A Sottilare
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by Robert A Sottilare

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This report provides a comprehensive bibliography of publications produced from 2013 through 2015 under the direction of the US Army Research Laboratory’s (ARL’s) adaptive training and education research program. This includes journal articles, technical reports, and conference papers produced by ARL employees and contractors to support the development of the Generalized Intelligent Framework for Tutoring prototypes to support an open-source architecture for authoring, delivering, and evaluating adaptive instruction.
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1. Introduction

Adaptive training and educational instruction provides tailored experiences that are guided by computer-based intelligent tutoring systems. This report provides a comprehensive bibliography of publications produced from 2013 through 2015 under the direction of the US Army Research Laboratory’s (ARL’s) adaptive training and education research program. The bibliography includes references for journal articles, technical reports, and conference papers produced by ARL employees and contractors to support the development of the Generalized Intelligent Framework for Tutoring (GIFT) prototypes during this period to provide an open-source architecture for authoring, delivering, and evaluating adaptive instruction. In addition to the GIFT symposia, conference papers were produced and presented at a variety of technical venues that included but were not limited to the following organizations’ conferences: Interservice/Industry Training, Simulation and Education, Artificial Intelligence in Education, Intelligent Tutoring Systems, Human Factors and Ergonomics, Applied Human Factors and Ergonomics, Augmented Cognition, Defense and Homeland Security Simulation, and Florida Artificial Intelligence Research Society. Contributors to these publications included members of US government agencies, academic institutions worldwide, and industry in the modeling, simulation, and training industrial base. References are arranged in reverse chronological order grouped by their year of publication.

2. Bibliography

2015 Publications


Long R, Hruska M, Medford AL, Murphy JS, Newton C, Killcullen T, Harvey RL. Adaptive gunnery training using the experience API. Presented at the Interservice/Industry Training Simulation and Education Conference; 2015 Dec; Orlando, FL.


Sottilare R, LaViola J. Extending intelligent tutoring beyond the desktop to the psychomotor domain: a survey of smart glass technologies. Presented at the Interservice/Industry Training Simulation and Education Conference; 2015 Dec; Orlando, FL.


Boland IT, Long RA, Farmer B, Raum D, Silverglate D, Sims E. Using social media with GIFT to crowd-source and enhance learning content. Presented at the 17th International Conference on Artificial Intelligence in Education (AIED); 2015 Jun; Madrid, Spain.

Brawner KW. Rapid dialogue and branching tutors. Presented at the 17th International Conference on Artificial Intelligence in Education (AIED); 2015 Jun; Madrid, Spain.

Bonner D, Walton J, Dorneich MC, Gilbert SB, Winer E, Sottilare R. The development of a testbed to assess an intelligent tutoring system for teams. Presented at the 17th International Conference on Artificial Intelligence in Education (AIED); 2015 Jun; Madrid, Spain.

Goldberg B, Hoffman M. Adaptive course flow and sequencing through the engine for management of adaptive pedagogy (EMAP). Presented at the 17th International Conference on Artificial Intelligence in Education (AIED); 2015 Jun; Madrid, Spain.

Goldberg B, Sottilare R, Brawner K, Sinatra A, Ososky S. Developing a generalized intelligent framework for tutoring (GIFT): informing design through a community of practice workshop at the 17th International Conference on Artificial Intelligence in Education (AIED); 2015 Jun; Madrid, Spain.


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Murray T. Chapter 2: theory-based authoring tool design: considering the complexity of tasks and mental models. In: Sottilare, Graesser A, Hu X,


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2014 Publications


Sinatra AM, Goldberg BS, Sottilare RA. The generalized intelligent framework for tutoring (GIFT) as a tool for human factors professionals. Presented at the Human Factors and Ergonomics Society Annual Meeting; 2014 Oct; Chicago, IL.


Brawner K, Graesser AC. Chapter 15: natural language, discourse, and conversational dialogues within intelligent tutoring systems: a review. In:


Goldberg B. What makes an effective pedagogical model? Presented at the International Conference on Intelligent Tutoring Systems Workshop; 2014 Jun 5–9; Honolulu, HI.


Goldberg B, Sottilare R. Pedagogy that makes a difference: exploring domain-independent principles across instructional management research within the ITS community. Presented at the International Conference on Intelligent Tutoring Systems Workshop; 2014 Jun 5–9; Honolulu, HI.


2013 Publications


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Fancsali S, Ritter S, Stamper J, Nixon T. Toward hyper-personalized cognitive tutors: non-cognitive personalization in the generalized intelligent framework


Nye, B. Integrating GIFT and AutoTutor with sharable knowledge objects (SKOs). Presented at the 1st Generalized Intelligent Framework for Tutoring (GIFT) Users Symposium at the Artificial Intelligence in Education (AIED) Conference; 2013 Jun; Memphis, TN.


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