

Call for Papers

International Conference on Artificial Intelligence in Education (AIED) Workshop: *Developing a Generalized Intelligent Framework for Tutoring (GIFT): Informing Design through a Community of Practice*

June 26, 2015, Madrid, Spain

The program committee invites researchers to submit papers highlighting their use of GIFT and recommendations for design enhancements in the following areas: automated authoring, automated instructional management, and effect analysis of learning outcomes.

Scope:

The purpose of this workshop is to examine current research within the AIED community focused on improving adaptive tools and methods for authoring, automated instruction and evaluation associated with the Generalized Intelligent Framework for Tutoring (GIFT). The organizers plan to demonstrate various authoring tools and capabilities available within GIFT and to allocate time for hands-on interaction with GIFT's authoring tools. The workshop will highlight the cutting-edge research being conducted by the GIFT community, along with a forum for open discussion on techniques applied and possible alternative solutions conveyed by participants. This topic is of particular interest to the open-community of researchers (400 users in 31 countries) currently involved in the development of GIFT, a free, open-source architecture to author, deliver, and evaluate adaptive functions in computer-based learning environments (Sottolare, Brawner, Goldberg, & Holden, 2013). The goal of this event is to provide an interactive forum for interested parties to learn about how GIFT operates, to learn about the various research efforts that are ongoing to improve its function, and to allow participants to share insights and opinions on presented work and demonstrations. This workshop is unique as it will also provide participants with opportunities to work alongside the presenters. Participants will be encouraged to bring their own laptops, and will be provided all necessary materials to follow demonstrations, thus allowing attendees to become familiar with the GIFT architectural structure and to learn how to construct original and unique functions. Attendees will also be encouraged to bring their own materials to use in demonstrations. This interaction is also intended to influence discussion from the participants based on their experience and opinions. As such, this workshop provides a forum for the ITS community to influence future development of GIFT by defining functions and processes they would like to see supported. The intent is to go through an in-depth exploration of all the topics being investigated by the GIFT community.

For GIFT to be fully embraced by the AIED community, the architecture must be flexible enough to accommodate varying pedagogical strategies deemed useful by the field. With that said, this is a critical time in GIFT's development, as standards and processes are still being defined. Throughout the workshop, participants will be given opportunities to provide feedback on the features and functionality of the various components and sub-components of GIFT in its current state. Such suggestions and/or feedback can be provided either through explicit mechanisms or through organic discussion generated via participation in the demonstrations. In this manner, workshop participants will also be able to shape future iterations of GIFT to better suit their research / instructional needs, better organize development workflow practices, and simply become more familiar with free and open source tools for ITS development.

Demonstrations, presentations, and tutorials are intended to target a number of topics including authoring tools, modeling techniques, instructional management practices. Each demonstration should include a “take away” for the audience, either in form of developed software, deployed tutor, improved model, or other item of interest.

Topics of Interest:

(1) Current research efforts looking into modeling techniques for GIFT managed ITSs. These papers are intended to focus directly on active research being worked across the GIFT community. Topics of interest include: (1) expert/cognitive modeling, (2) affect modeling, (3) metacognitive modeling, and (4) collaborative/team modeling. Each contributing author will be instructed to provide a demonstration of their approach and how it is applied within the GIFT architecture.

(2) Research examining how GIFT interfaces with a learner and the types of interactions it must support. Papers will be targeted that focus on current projects seeking to enhance GIFT with natural language functions, instructional strategy implementations based on performance or affective states of a learner, and tools designed to support adaptive course functions. Each contributing author will be instructed to provide a demonstration of their approach and how it is applied within the GIFT architecture.

(3) Research efforts aiming to extend GIFT models and components to support persistent functions. These functions include the ability to maintain long-term learner models that can be used to moderate adaptive functions in a real-time learning event, the ability to support reuse of learning objects across systems, and the role social media can play in the learning process with such systems. Each contributing author will be instructed to provide a demonstration of their approach and how it is applied within the GIFT architecture.

Each paper should highlight a specific technology that can be demonstrated to attendees. Presenters will be given 30 minutes. All authors will provide demonstration materials to attendees so they can follow along on their own machines. In addition, authors on each paper will be asked to conclude with a feasibility analysis of their techniques applied within a domain-independent architecture like GIFT and what assumptions and limitations are associated with its instantiation.

More information about GIFT can be found on www.gifttutoring.org.

Formatting instructions:

Please ensure that your papers are formatted correctly and are within the 6-page limit. Abstracts should be 500 words or less. Go to the Information for LNCS Authors for additional information on formatting. Download the LNCS template for the word processing software you would like to use. E.g., when using Word 2007, download LNCS-Office2007.zip, when using Word 97-2003, download word.zip, when using LaTeX, download lncs.zip, and so forth. Note that most but not all of these downloads are listed at the top right (notable exception: LNCS-Office2007.zip is listed further down). You may ascertain which file to download for use with your preferred word processor by clicking on the relevant "Proceedings and Other Multi-author Volumes " link.

For Word 2007 this actually gets you to the download link. Unzip the file and study the instructions.

Submission instructions:

Paper submissions should be 6 pages maximum in Springer LNCS format and submitted through Easy Chair at: <https://www.easychair.org/conferences/?conf=GIFT-AIED-2015>. Only submissions in .doc (Word) format will be accepted. All submissions should be in English. Address any questions to benjamin.s.goldberg.civ@mail.mil.

Important dates:

Workshop Papers due: March 20, 2015

Decisions communicated to authors: April 20, 2015

Camera ready papers due: May 05, 2015

Workshop date: June 26, 2015