

Curriculum Vitae

Michael Glass

Business Address:

Dept. of Math & CS
Valparaiso University
Valparaiso, IN 46383
219-464-5161

michael point glass at valpo point edu

Home Address:

205 Exmoor Ave.
Glen Ellyn, IL 60137
630-858-1554

Education

Illinois Institute of Technology, 1993-98, Ph.D. in Computer Science

Illinois Institute of Technology, 1984-86, MS in Computer Science.

University of Chicago, 1971-74.

Experience

2002– Valparaiso University, Assistant Professor in the Dept. of Math and Computer Science

2000–2002 University of Illinois at Chicago, post doctoral researcher working with Dr. Barbara Di Eugenio

1999–2000 Illinois Institute of Technology, full-time Lecturer in the Computer Science program

1995–1998 Illinois Institute of Technology, research assistant for Dr. Martha W. Evens

1987–1995 Illinois Institute of Technology, part-time instructor in Computer Science

1978–1993 Fermi National Accelerator Laboratory, programmer designing controls for the particle accelerators

1974–1978 International Telephone and Telegraph, programmer designing telephone switching equipment

Research Interests

Dialogue-based intelligent tutoring technology.

Computational linguistics.

Tutorial dialogue.

Teaching Experience

Computability theory, graduate and undergraduate.
 Formal languages and automata, graduate and undergraduate.
 Data structures, algorithms, and object-oriented programming
 Special topics in programming for advanced undergraduates.
 Algorithms, undergraduate.
 Programming in various languages.
 Computational Linguistics.
 Operating systems, undergraduate.
 Computer architecture, undergraduate.
 Computer graphics

Professional Activities

Organizing committees for the AAAI 2000 Fall Symposium on Dialogue Systems and many MAICS conferences, including reviewing papers and miscellaneous other work.
 Chair of MAICS-2006 Midwest AI and Cognitive Science Conference.
 Occasional reviewer for several conferences: Association for Computational Linguistics, Florida AI Symposium, Cognitive Science Society.

Publications

Papers in Refereed Journals

- Di Eugenio, Barbara, Davide Fossati, Susan Haller, Dan Yu, and **Michael Glass**. 2008. Be Brief, And They Shall Learn: Generating Concise Language Feedback for a Computer Tutor. *International Journal of Artificial Intelligence in Education*, vol. 18 no. 4.
- Glass, Michael** and Martha W. Evens. 2008. Extracting Information from Natural Language Input to an Intelligent Tutoring System. *Far Eastern Journal of Experimental and Theoretical Artificial Intelligence*, vol. 1 no. 2, pp. 87–125.
- Kim, Jung Hee, Reva Freedman, **Michael Glass**, and Martha W. Evens. 2006. Annotation of Tutorial Goals for Natural Language Generation. *Discourse Processes*, vol. 42 no. 1, pp. 37–74.
- Woo, Woo Chong, Martha W. Evens, Reva Freedman, **Michael Glass**, Leemseop Shim, Yuemei Zhang, Yujian Zhou, Joel A. Michael. 2006. An Intelligent Tutoring System That Generates a Natural Language Dialogue Using Dynamic Multi-level Planning, *Artificial Intelligence in Medicine*, vol. 38 no. 1, pp. 25–46.
- Di Eugenio, Barbara and **Michael Glass**. 2004. The Kappa Statistic: A Second Look, *Computational Linguistics*, vol. 32 no. 1, pp. 95–101.
- Michael, Joel, Allen Rovick, **Michael Glass**, Yujian Zhou, and Martha W. Evens, 2003. Learning from a Computer Tutor with Natural Language Capabilities, *Interactive Learning Environments*, vol. 11 no. 3, pp. 233–262.

Papers at Refereed Conferences

- Truong, Van, **Michael Glass**, and Jung Hee Kim, 2010. Finding the Algebra Sublanguage for Math Tutorial Dialogue, *Proceedings of the International Conference on Education and New Learning Technology (EDULEARN-10)*, Barcelona, Spain, July 5-7, 2010.
- Truong, Van, **Michael Glass**, and Jung Hee Kim. 2009. Developing an Algebra Sublanguage for Tutorial Dialogues, *Twentieth Midwest AI And Cognitive Science Conference (MAICS 2009)*, Fort Wayne.
- Waddy, Sekoya, Jung Hee Kim, and **Michael Glass**. 2009. Tutoring Dialogue Goals for Conceptual Understanding of Differential Equations: Preliminary Work. *Twentieth Midwest AI And Cognitive Science Conference (MAICS 2009)*, Fort Wayne.
- Glass, Michael**, Jung Hee Kim, Karen Allen Keene, and Kathy Cousins-Cooper. 2007. Towards Wooz-2: Supporting Tutorial Dialogue for Conceptual Understanding of Differential Equations, *Eighteenth Midwest AI and Cognitive Science Conference (MAICS-2007)*, Chicago, pp. 105–110.
- Di Eugenio, Barbara, Davide Fossati, Dan Yu, Susan Haller and **Michael Glass**. 2005. Natural language generation for intelligent tutoring systems: a case study, *Artificial Intelligence in Education: Supporting Learning through Intelligent and Socially Informed Technology (Proceedings of the 2005 International Conference, Amsterdam)*, IOS Press.
- Di Eugenio, Barbara, Davide Fossati, Dan Yu, Susan Haller and **Michael Glass**. 2005. Aggregation Improves Learning: Experiments in Natural Language Generation for Intelligent Tutoring Systems, *Proc. of the 43rd Annual Meeting of the Association for Computational Linguistics (ACL'05)* Ann Arbor, pp. 50–57
- Chae, Hyeun Me, Jung Hee Kim, and **Michael Glass**. 2005. Effective Behaviors in a Comparison Between Novice and Expert Algebra Tutors, *Sixteenth Midwest AI and Cognitive Science Conference (MAICS-2005)*, Dayton, pp. 25–30.
- Kim, Jung Hee and **Michael Glass**. 2004. Evaluating Dialogue Schemata with the Wizard of Oz Computer-Assisted Algebra Tutor, *Intelligent Tutoring Systems: 7th Int'l Conf., ITS2004* Maceió, Brazil, Springer, pp. 358–367.
- Lee, Chung-Hee, Martha Evens, and **Michael Glass**, 2004. Looking at the student input to a natural language-based tutoring system, *Proceedings of ITS 2004 Workshop on Dialogue-Based Tutoring Systems*, Maceió, Brazil, pp. 15–22.
- Patel, Niraj, **Michael Glass**, and Jung Hee Kim. 2003. Data Collection Application for the North Carolina A&T State University Algebra Tutoring Dialogue (Wooz Tutor) Project, *Fourteenth Midwest Cognitive Science and AI Conference (MAICS-03)*, Cincinnati.
- Di Eugenio, Barbara, Susan Haller, and **Michael Glass**. 2003. Development and Evaluation of NL Interfaces in a Small Shop. *AAAI Spring Symposium: Natural Language Generation in Spoken and Written Dialogue*.
- Serafin, Riccardo, Barbara Di Eugenio, and **Michael Glass** 2003. Latent Semantic Analysis for Dialogue Act Classification, *Proc. 2003 Human Language Technology Conference (HLT 2003)*, Edmonton, CA.

- Di Eugenio, Barbara, **Michael Glass**, and Michael Trolio. 2002. The DIAG experiments: Natural Language Generation for Intelligent Tutoring Systems, *International Natural Language Generation Conference (INLG '02)*, New York.
- Glass, Michael** and Barbara Di Eugenio, 2002. MUP: The UIC Standoff Markup Tool, *Third SIGDial Workshop on Discourse and Dialogue (SIGDial-02)*, Philadelphia.
- Glass, Michael** and Barbara Di Eugenio, 2002. MUP: The UIC Markup Tool, *Thirteenth Midwest Cognitive Science and AI Conference (MAICS-02)*, Chicago.
- Yang, Feng-Jen, **Michael Glass**, and Martha W. Evens. 2001. Evaluation of the Turn Planner in CIRCSIM-Tutor, *17th International Conference on Advanced Science and Technology, ICAST-2001*, Chicago, pp. 47–51.
- Freedman, Reva, Byung-In Cho, **Michael Glass**, Yujian Zhou, Jung Hee Kim, Bruce Mills, Feng-Jen Yang, Martha W. Evens, and the CIRCSIM-Tutor Project. 2001. Adaptive Processing in a Medical Intelligent Tutoring System, *Proceedings of NAACL 2001 Workshop on Adaptation in Dialogue Systems*, Pittsburgh.
- Di Eugenio, Barbara, **Michael Glass**, Michael J. Trolio, and Susan Haller. 2001. Simple Natural Language Generation and Intelligent Tutoring Systems. Workshop on Tutorial Dialogue Systems, in conjunction with 2001 AI in Education Conference, San Antonio.
- Glass, Michael**. 2001. Processing Language Input in the CIRCSIM-Tutor Intelligent Tutoring System, in Moore, J.D. C.L. Redfield, and W.L. Johnson, eds., *Artificial Intelligence in Education: AI-ED in the Wired and Wireless Future* (Proceedings of the 2001 AI in Education conference, San Antonio), IOS Press., pp. 210–221.
- Glass, Michael**. 2000. Processing Language Input in the CIRCSIM-Tutor Intelligent Tutoring System, *AAAI 2000 Fall Symposium: Dialogue Systems for Tutorial Applications*
- Kim, Jung Hee, **Michael Glass**, Reva Freedman, and Martha W. Evens. 2000. Learning Use of Discourse Markers in Tutorial Dialogue for an Intelligent Tutoring System, *Twenty-Second Annual Conference of the Cognitive Science Society*, Philadelphia.
- Yang, Feng-Jen, Jung Hee Kim, **Michael Glass**, and Martha W. Evens. 2000. Turn Planning in CIRCSIM-Tutor: Analysis of Variable References and Discourse Markers, *Proceedings of the Thirteenth Florida Artificial Intelligence Research Symposium (FLAIRS-2000)*, Orlando, FL
- Yang, Feng-Jen, Jung Hee Kim, **Michael Glass**, and Martha W. Evens. 2000. Lexical Usage in the Tutoring Schemata of CIRCSIM-Tutor: Analysis of Variable References and Discourse Markers, *Fifth Annual Conference on Human Interaction with Complex Systems (HICS-2000)*, Urbana, IL.
- Glass, Michael**, Jung Hee Kim, Martha W. Evens, Joel A. Michael, and Allen A. Rovick. 1999. Novice vs. Expert Tutors: A Comparison of Style, *Tenth Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-99)*, Bloomington, IN, pp. 43–49.
- Zhou, Yujian, Reva Freedman, **Michael Glass**, Joel A. Michael, Allen A. Rovick, Martha W. Evens. 1999. Delivering Hints in a Dialogue-Based Intelligent Tutoring System, *Sixteenth National Conference on Artificial Intelligence (AAAI-99)*, Orlando, FL.

- Zhou, Yujian, Reva Freedman, **Michael Glass**, Joel A. Michael, Allen A. Rovick and Martha W. Evens. 1999. What Should the Tutor Do When the Student Cannot Answer a Question? *Proceedings of the Twelfth Florida Artificial Intelligence Research Symposium, Orlando, FL*, 1999, pp. 187–191.
- Freedman, Reva, Yujian Zhou, **Michael Glass**, Jung Hee Kim and Martha W. Evens. 1998. Using Rule Induction to Assist in Rule Construction for a Natural-Language Based Intelligent Tutoring System, *Twentieth Annual Conference of the Cognitive Science Society, Madison, WI*, 1998, pp. 362–367.
- Freedman, Reva, Yujian Zhou, Jung Hee Kim, **Michael Glass** and Martha W. Evens. 1998. SGML-Based Markup as a Step Toward Improving Knowledge Acquisition for Text Generation, *AAAI 1998 Spring Symposium: Applying Machine Learning to Discourse Processing*, pp. 114–117.
- Glass, Michael**. 1997. Some Phenomena Handled by the CIRCSIM-Tutor Version 3 Input Understander, *Proceedings of the Tenth Florida Artificial Intelligence Research Symposium, Daytona Beach, FL*, 1997, pp. 21–25.
- Glass, Michael** and Martha W. Evens. 1996. Goals for the Circsim-Tutor v.3 Input Understander, *Online Proceedings of the 1996 Midwest Artificial Intelligence and Cognitive Science Conference, Bloomington, IN*, 1996.
- Glass, Michael**, James Zagel, Patricia Smith, William Marsh and John Smolucha. 1989. The Upgraded Tevatron Front End, *Nuclear Instruments and Methods*, vol. A293, pp. 87–92. Presented at the International Conference on Accelerator and Large Experimental Physics Control Systems, Vancouver, BC, 1989.
- Glass, Michael**. 1985. Lessons from the Tevatron Front End, *Nuclear Instruments and Methods*, vol. A247, pp. 133–138. Presented at the Second Workshop on Accelerator Control Systems, Los Alamos, NM, 1985.
- Cooper, Steve, David Garney, **Michael Glass**, William Koller and Victor Zynszajn. 1975. TCS System Software Production, *Proceedings of the National Electronics Conference Volume XXX, Chicago, IL*, pp. 307–312.

Abstracts

- Glass, Michael**. 2005. Adding to LSA's Bag for Information Retrieval (Poster abstract), *Proc. 27th Annual Conference of the Cognitive Science Society, COGSCI 2005*, Stresa, Italy
- Kim, Jung Hee, Hyeun Me Chae, and **Michael Glass**. 2005. Expert and Novice Algebra Tutor Behaviors Compared (Poster abstract), *Proc. 27th Annual Conference of the Cognitive Science Society, COGSCI 2005*, Stresa, Italy
- Keene, Karen Allen and **Michael Glass**. 2008. Undergraduate mathematics tutoring: Concepts or procedures? (Presentation abstract), Conference on Research in Undergraduate Mathematics Education (CRUME 2008), Mission Valley, CA. <http://sigmaa.maa.org/rume/crume2008/abstracts.html>

Submitted

- Glass, Michael**, Karen Keene, and Jung Hee Kim. 2011. Identifying and Assessing Relational Thinking Skills in Ordinary Differential Equations. Abstract of 6-page paper, submitted to Frontiers in Education 2011 conference.

Membership in Professional Societies

Association for Computing Machinery

Association for Computational Linguistics

Association for the Advancement of Artificial Intelligence

Society for Text and Discourse

Cognitive Science Society

International AI in Education Society