Curriculum Vitae
Michael Glass

Business Address:
Dept. of Computing and Information Sci.
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 then Associate Professor in the Dept. of Computer and Information Science, formerly of 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.

Computer-supported collaborative learning.

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, e.g. Java, C, C++, Python, Assembler

Computational Linguistics.

Operating systems, undergraduate.

Computer architecture, undergraduate.

Computer graphics

Databases for CS and IT

Artificial intelligence

Networking, undergraduate

Linux system administration and security

Programming Languages

Professional Activities

Occasionally on the organizing committees and reviewer for various workshops and conferences, including most years for the MAICS conference since about 2000.

Chair of MAICS-2006 Midwest/Modern AI and Cognitive Science Conference, program chair for 2013 and 2015.

Occasional reviewer for several conferences and journals: Association for Computational Linguistics, Florida AI Symposium, Cognitive Science Society, Computer-Supported Collaborative Learning, International Journal for AI in Education, Consortium for Computing Sciences in Colleges.

Publications

Papers in Refereed Journals

Kim, Jung Hee, Joelle Banks, Duy Bui, and Michael Glass. 2021. "Automated Classification of Collaboration Skills in Typed-Chat Collaborative Problem-Solving." *Journal of Computing Sciences in Colleges*, vol. 36, no. 5, pp. 97–106.

Glass, Michael. 2019. "To Heck With Ethics: Thinking About Public Issues With a Framework for CS Students." *Journal of Computing Sciences in Colleges*, vol. 35, no. 2, pp. 89–98.

Glass, Michael, Yesukhei Jagvaral, Nathaniel Bouman, Emily Graham, Stamatina Kalafatis, Lindsey Arndt, Melissa Desjarlais, Jung Hee Kim, and Kelvin Bryant. 2018. "Problem-Independent Text Analytics for Real-Time Judgment of CSCL Typed-Chat Dialogues." *Journal of Computing Sciences in Colleges*, vol. 34, no. 1, pp. 145–154.

Rosasco, Nicholas S. and Michael Glass. 2017. "So What Are You Here For?: Self-efficacy and Self-criticism as a Route to Coding Maturity." *Journal of Computing Sciences in Colleges*, vol. 32 no. 6 (June), pp. 141–150.

Willis, Angelica, Ashana Evans, Jung Hee Kim, Kelvin Bryant, Yesukhei Jagvaral, and Michael Glass. 2017. Identifying Domain Reasoning to Support Computer Monitoring in Typed-Chat Problem Solving Dialogues *Journal of Computing Sciences in Colleges*, vol. 33 no. 2 (December), pp. 11–19.

Kim, Jung Hee, Taehee Kim, and Michael Glass. 2016. Early Experience with Computer Supported Collaborative Exercises for a 2nd Semester Java Class. *Journal of Computing Sciences in Colleges*, vol. 32 no. 2 (December), pp. 68–86.

Glass, Michael, Jung Hee Kim, Kelvin Bryant, and Melissa Desjarlais. 2015. Come Let Us Chat Together: Simultaneous Typed-Chat in Computer-Supported Collaborative Dialogue. *Journal of Computing Sciences in Colleges*, vol. 31 no. 2 (December), pp. 96–105.

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

Bui, Duy, Matthew Trotter, Jung Hee Kim, Michael Glass, and Soo-Hyung Kim. 2019. Dialogue Acts Within Typed-Chat Collaborative Problem-Solving For a University Programming Class. *International Technology, Education and Development Conference INTED2019*, Valencia, pp. 7291–7298

Glass, Michael, Yesukhei Jagvaral, Chinedu Emeka, and Jung Hee Kim. 2018. Typing Differences in Simultaneous Typed Chat. *Intelligent Tutoring Systems, 14th International Conference*, Montreal. Springer pp. 431–433.

Carden, John, Kaila Billie, Jung Hee Kim, Michael Glass. 2018. Information Assurance for Computer- Mediated Chat in an Education and Research Environment. *10th annual International Conference on Education and New Learning Technologies (EDULEARN)*, 7 pp.

Glass, Michael, Anthony Nelson, Chinedu Emeka, and Jung Hee Kim. 2017. Not Interfering: Simultaneous Typed Chat in COMPS Computer-Mediated Dialogues. *Modern AI and Cognitive Science Conference*, Fort Wayne, IN. pp. 107-113.

Kim, Jung Hee, Michael Glass, Taehee Kim, Kelvin Bryant, Angelica Willis, Ebonie McNeil, Zachery Thomas. 2016. Student Understanding and Engagement in a Class Employing COMPS Computer Mediated Problem Solving. *Modern AI and Cognitive Science Conference*, Dayton, OH. pp. 69–74

Glass, Michael, Jung Hee Kim, Kelvin Bryant Melissa Desjarlais. 2014. Indicators of Conversational Interactivity in COMPS Problem-Solving Dialogues. *Third Workshop on Intelligent Support for Learning in Groups (ISLG)*. Honolulu.

Glass, Michael, Jung Hee Kim, Kelvin Bryant Melissa Desjarlais. 2014. Toward Measurement of Conversational Interactivity in COMPS Computer Mediated Problem-Solving Dialogues, *Modern AI and Cognitive Science Symposium*, Spokane, WA.

Kim, Jung Hee, Melissa Desjarlais, Kelvin Bryant, and Michael Glass. 2013. Observations of Collaborative Behivor in COMPS Computer-Mediated Problem Solving. *Midwest AI and Cognitive Science Symposium*, New Albany, IN.

Desjarlais, Melissa, Jung Hee Kim, and Michael Glass, 2012. COMPS Computer Mediated Problem Solving: A First Look, *Midwest AI and Cognitive Science Symposium*, Cincinnati

Keene, Karen, Michael Glass, and Jung Hee Kim. 2011. Identifying and Assessing Relational Understanding in Ordinary Differential Equations, *Frontiers in Education (FIE 2011)*, Rapid City, Oct. 12–15.

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.

Short Papers and Abstracts

Bui, Duy, Jung Hee Kim, Michael Glass. 2020. Dialogue Act Pairs for Automated Analysis of Typed-Chat Group Problem Solving, *Intelligent Tutoring Systems: 16th International Conference, ITS2020*, Springer pp 378–381.

Bui, Duy, Matthew Trotter, Jung Hee Kim, and Michael Glass. 2019. Patterns of Collaboration Dialogue Acts in Typed-Chat Group Problem-Solving (short-paper poster abstract), *Intelligent Tutoring Systems: 15th International Conference, ITS2019*, Springer, pp. 236–238.

Willis, Angelica, Ashana Evans, Jung Hee Kim, Kelvin Bryant and Michael Glass. 2017. Topic Modeling to Detect Student Expressions of Understanding in Collaborative Problem-Solving Dialogues (short-paper poster abstract), *Proceedings of 30th Florida Artificial Intelligence Research Symposium (FLAIRS-30)*, May 2017, Marco Island, FL. AAAI Press.

Glass, Michael, Melissa Desjarlais, Jung Hee Kim, Kelvin Bryant. 2013. COMPS Computer-Mediated Problem Solving Dialogues (poster abstract), *International Conference on Computer Supported Collaborative Learning (CSCL)*, Madison, WI, 2013.

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`

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

Membership in Professional Societies

International Society for the Learning Sciences, Computer Supported Collaborative Learning association

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