

JOHN C. STAMPER

jstamper@cmu.edu

EDUCATION

PhD, Information Technology (May 2010),

University of North Carolina at Charlotte,

Dissertation Title: Automatic Generation of Intelligent Tutoring Capabilities via Educational Data Mining.

Graduate Certificate in Cognitive Science (May 2007),

University of North Carolina at Charlotte.

MBA, Business Administration and Management (May 2000),

University of Cincinnati.

BS, Systems Analysis with special interest in Operations Research (December 1994),

Miami University.

EMPLOYMENT

Associate Professor, Human-Computer Interaction Institute, Carnegie Mellon University, (July 2021 – Present).

Courses include: Interactive Data Science, METALS Capstone (I & II), MCDS Capstone (I & II), Data Science for Product Managers, Foundations of Computational Data Science

Assistant Professor, Human-Computer Interaction Institute, Carnegie Mellon University, (Aug 2015 – July 2021).

Courses include: Interactive Data Science, Learning Analytics and Educational Data Science, Tools for Online Learning, METALS Capstone (I & II), MCDS Capstone (I & II), Data Science for Product Managers, Foundations of Computational Data Science

Systems Scientist, Human-Computer Interaction Institute, Carnegie Mellon University, (Aug 2009 – Aug 2015).

Courses include: Tools for Online Learning, METALS Capstone (I & II), MCDS Capstone (I & II)

Technical Director, Pittsburgh Science of Learning Center DataShop, Carnegie Mellon University, (Aug 2009 – Present).

CEO/Founder, TutorGen, Inc., Fort Thomas, KY, (Feb 2012 – Present).

Research Assistant, Game and Learning Lab, Department of Computer Science, University of North Carolina at Charlotte, (Aug 2005 – Aug 2009).

Adjunct Instructor, Department of Marketing, Belk College of Business, University of North Carolina at Charlotte, (Aug 2008 – Dec 2008). Courses include: Internet Marketing

Teaching Assistant, Department of Computer Science, University of North Carolina at Charlotte, (Aug 2006 – Aug 2008). Courses include: Game Development, Intelligent Tutoring Systems, Introduction to Computer Applications, and Discrete Mathematics

Research Assistant, Distributed Artificial Intelligence Research Lab, Department of Software and Information Systems, University of North Carolina at Charlotte, (Aug 2004 – Aug 2005).

Adjunct Professor, Department of Computer Information Systems, College of Mount St. Joseph, Cincinnati, OH, (Aug 2001 – June 2002). Courses include: Intro to Programming, Advanced Programming, and Data Communications

Vice President of Development, VSI Technologies, Inc., Cincinnati, OH (Jun 1999 – Aug 2004)

Manager of Information Systems, ProtoCall, LLC., Cincinnati, OH (May 1997 – Jun 1999)

Programmer/Analyst, Lehmkuhl & Associates, Inc., Blue Ash, OH (Oct 1994 – May 1997)

EDITED VOLUMES AND PROCEEDINGS

- V1. Micarelli, A., Stamper, J., Panourgia, K. (eds.) *Proceedings of the 13th International Conference on Intelligent Tutoring Systems*. ITS 2016.
 - V2. Stamper, J., Pardos, Z., Mavrikis, M., McLaren, B.M. (eds.) *Proceedings of the 7th International Conference on Educational Data Mining*. EDM 2014.
 - V3. Yacef, K., Zaïane, O., Hershkovitz, H., Yudelson, M., and Stamper, J. (eds.) *Proceedings of the 5th International Conference on Educational Data Mining*. EDM 2012.
 - V4. Stamper, J., Koedinger, K., Gordon, G., Baker, R. (eds.) *Proceedings of the KDD 2011 Workshop: Knowledge Discovery in Educational Data*, at the 17th ACM SIGKDD Conference on Knowledge Discovery and Data Mining. 2011.
 - V5. Pechenizkiy, M., Calders, T., Conati, C., Ventura, S., Romero, C., and Stamper, J. (Eds.) *Proceedings of the 4th International Conference on Educational Data Mining*. EDM 2011. Data Mining. Boca Raton, FL: CRC Press.
-

CHAPTERS IN BOOKS

- B1. Barnes, T., Stamper, J. & Croy, M. (2010). Using Markov decision processes for student problem-solving visualization and automatic hint generation. In Romero, C., Ventura, S., Pechenizkiy, M., Baker, R.S.J.d. (Eds.) Handbook of Educational Data Mining. Boca Raton, FL: CRC Press.
 - B2. Koedinger, K.R., Baker, R.S.J.d., Cunningham, K., Skogsholm, A., Leber, B., Stamper, J. (2010) A Data Repository for the EDM community: The PSLC DataShop. In Romero, C., Ventura, S., Pechenizkiy, M., Baker, R.S.J.d. (Eds.) Handbook of Educational Data Mining. Boca Raton, FL: CRC Press.
 - B3. Croy, M., T. Barnes, Stamper, J. (2007). Towards an Intelligent Tutoring System for propositional proof construction. In Philip Brey, Adam Briggie and Katinka Waelbers (eds.), Current Issues in Computing and Philosophy, Amsterdam, Netherlands: IOS Publishers.
-

REFEREED JOURNAL PAPERS - PUBLISHED

- J1. Liu, R., Stamper, J., Davenport, J., Crossley, S., McNamara, D., Nzinga, K., & Sherin, B. L. (2019). Learning linkages: Integrating data streams of multiple modalities and timescales. *Journal of Computer Assisted Learning*, 35(1), 99-109.
- J2. Liu, R., Stamper, J., & Davenport, J. (2018). A Novel Method for the In-Depth Multimodal Analysis of Student Learning Trajectories in Intelligent Tutoring Systems. *Journal of Learning Analytics*, 5(1), 41-54.
- J3. Grover, S., Basu, S., Bienkowski, M., Eagle, M., Diana, N., & Stamper, J. (2017). A Framework for Using Hypothesis-Driven Approaches to Support Data-Driven Learning Analytics in Measuring Computational Thinking in Block-Based Programming Environments. *ACM Transactions on Computing Education (TOCE)*, 17(3), 14.
- J4. Stamper, J., Pardos, Z. (2016). The 2010 KDD Cup Competition Dataset: Engaging the machine learning community in predictive learning analytics. In *The Journal of Learning Analytics*. Vol 3. No. 2 Pp. 312-316.
- J5. Stamper, J., Barnes, T., Croy, M., Eagle, M. (2013). Experimental Evaluation of Automatic Hint Generation for a Logic Tutor. In *The International Journal of Artificial Intelligence in Education (IJAIED)*, 22 (1). pp. 29-41.
- J6. Koedinger, K.R., Brunskill, E., Baker, R.S.J.d., McLaughlin, E.A., Stamper, J. (2013) New potentials for data-driven intelligent tutoring system development and optimization. *AI Magazine*. 34 (3).
- J7. Koedinger, K.R., Stamper, J.C., Leber, B., & Skogsholm, A. (2013). LearnLab's DataShop: A Data Repository and Analytics Tool Set for Cognitive Science. *Topics in Cognitive Science*. 5 (3).

- J8. Stamper, J., Barnes, T., Croy, M. (2011). Enhancing the Automatic Generation of Hints with Expert Seeding. In *The International Journal of Artificial Intelligence in Education (IJAIED)*, Special Issue on the Best of ITS 2010.
- J9. Barnes, T. & Stamper, J. (2009). Automatic hint generation for logic proof tutoring using historical data. In *Journal of Educational Technology & Society, Special issue on Intelligent Tutoring Systems*, Volume 13, Issue 1.

HIGHLY REFEREED CONFERENCE/WORKSHOP PAPERS

- C1. Shrivya Bhat, Huy Nguyen, Steven Moore, John Stamper, Majd Sakr, and Eric Nyberg (2022). Towards Automated Generation and Evaluation of Questions in Educational Domains. In *Proceedings of the 15th International Conference on Educational Data Mining*. 701-704. International Educational Data Mining Society.
- C2. Diana, Nicholas, Stamper, John, Koedinger, Ken, and Hammer, Jessica (2022). Debiasing Politically Motivated Reasoning with Value-Adaptive Instruction. In *Artificial Intelligence in Education*. 140-152. Springer International Publishing.
- C3. Diana, Nicholas, and Stamper, John (2022). Reducing Bias in a Misinformation Classification Task with Value-Adaptive Instruction. In *Artificial Intelligence in Education*. 567-572. Springer International Publishing.
- C4. Moore, Steven, Nguyen, Huy, and Stamper, John (2022). Leveraging Students to Generate Skill Tags that Inform Learning Analytics. In *Proceedings of the 16th International Conference of the Learning Sciences*. 791-798. International Society of the Learning Sciences.
- C5. Moore, Steven, Nguyen, Huy, and Stamper, John (2022). Participation and Success with Optional Self-Explanation for Students in Online Undergraduate Chemistry Courses. In *Proceedings of the 16th International Conference of the Learning Sciences*. 1381-1384. International Society of the Learning Sciences.
- C6. Moore, Steven, Nguyen, Huy A., Bier, Norman, Domadia, Tanvi, and Stamper, John (2022). Assessing the Quality of Student-Generated Short Answer Questions Using GPT-3. In *Educating for a New Future: Making Sense of Technology-Enhanced Learning Adoption*. 243-257. Springer International Publishing.
- C7. Nguyen, Huy A., Bhat, Shrivya, Moore, Steven, Bier, Norman, and Stamper, John (2022). Towards Generalized Methods for Automatic Question Generation in Educational Domains. In *Educating for a New Future: Making Sense of Technology-Enhanced Learning Adoption*. 272-284. Springer International Publishing.
- C8. Carmichael, Ted, Stamper, John, and Carney, John (2022). Developing a Continuous, Rather Than Binary, Classification for Measuring STEM Jobs. In *6th APSCE International Conference on Computational Thinking and STEM Education 2022 (CTE-STEM 2022)*.
- C9. Moore, Steven, Nguyen, Huy Anh, and Stamper, John (2021). Examining the Effects of Student Participation and Performance on the Quality of Learnersourcing Multiple-Choice Questions. In *Proceedings of the Eighth ACM Conference on Learning@ Scale*. 209-220.
- C10. Nguyen, Huy, Lim, Michelle, Moore, Steven, Nyberg, Eric, Sakr, Majd, and Stamper, John (2021). Exploring Metrics for the Analysis of Code Submissions in an Introductory Data Science Course. In *LAK21: 11th International Learning Analytics and Knowledge Conference*. 632-638.
- C11. Diana, N., Stamper, J., & Koedinger, K. (2020). Towards Value-Adaptive Instruction: A Data-Driven Method for Addressing Bias in Argument Evaluation Tasks. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-11).
- C12. Moore, S., Stamper, J., Bier, N., & Blink, M. J. (2020). A Human-Centered Approach to Data Driven Iterative Course Improvement. In *International Conference on Remote Engineering and Virtual Instrumentation* (pp. 742-761). Springer, Cham.
- C13. Moore, S., Nguyen, H. A., & Stamper, J. (2020). Evaluating Crowdsourcing and Topic Modeling in Generating Knowledge Components from Explanations. In *International Conference on Artificial Intelligence in Education* (pp. 398-410). Springer, Cham.
- C14. Nguyen, H. A., Guo, Y., Stamper, J., & McLaren, B. M. (2020). Improving Students' Problem-Solving Flexibility in Non-routine Mathematics. In *International Conference on Artificial Intelligence in Education* (pp. 409-413). Springer, Cham.

- C15. Nguyen, H. A., Hou, X., Stamper, J., & McLaren, B. M. (2020). Moving beyond Test Scores: Analyzing the Effectiveness of a Digital Learning Game through Learning Analytics. *International Educational Data Mining Society*.
- C16. Moore, S., Nguyen, H. A., & Stamper, J. (2020). Towards Crowdsourcing the Identification of Knowledge Components. In *Proceedings of the Seventh ACM Conference on Learning@ Scale* (pp. 245-248).
- C17. Stamper, John, and Moore, Steven (2019). Exploring Teachable Humans and Teachable Agents: Human Strategies Versus Agent Policies and the Basis of Expertise. In *Artificial Intelligence in Education*. 269-274. Springer International Publishing.
- C18. Diana, Nicholas, Stamper, John, and Koedinger, Kenneth (2019). Online Assessment of Belief Biases and Their Impact on the Acceptance of Fallacious Reasoning. In *Artificial Intelligence in Education*. 62-66. Springer International Publishing.
- C19. Moore, S., & Stamper, J. C. (2019). Exploring Expertise through Visualizing Agent Policies and Human Strategies in Open-Ended Games. In *EDM 2019 (Workshops)* (pp. 30-37).
- C20. Wang, Yeyu, Nguyen, Huy, Harpstead, Erik, Stamper, John, and McLaren, Bruce M. (2019). How Does Order of Gameplay Impact Learning and Enjoyment in a Digital Learning Game?. In *Artificial Intelligence in Education*. 518-531. Springer International Publishing.
- C21. Moore, Steven, and Stamper, John (2019). Decision Support for an Adversarial Game Environment Using Automatic Hint Generation. In *Intelligent Tutoring Systems*. 82-88. Springer International Publishing.
- [Best Paper Finalist]**
- C22. Nguyen, Huy, Wang, Yeyu, Stamper, John, and McLaren, Bruce M (2019). Using Knowledge Component Modeling to Increase Domain Understanding in a Digital Learning Game. In *International Conference on Educational Data Mining*.
- C23. Soniya, Gadgil, Moore, Steven, and Stamper, John (2019). How does Performance in an Online Primer Predict Achievement in a Future Computer Science Course?. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 300-306.
- C24. Moore, Steven, Stamper, John, and Soniya, Gadgil (2019). Human-Centered Data Science for Educational Technology Improvement using Crowd Workers. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 341-347.
- C25. Carmichael, Ted, Blink, Mary Jean, and Stamper, John (2019). TutorGen SCALE® - Student Centered Adaptive Learning Engine. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 964-973.
- C26. Diana, N., Eagle, M., Stamper, J., Grover, S., Bienkowski, M., & Basu, S. (2018). Measuring Transfer of Data-Driven Code Features Across Tasks in Alice. In *Proceedings of the Educational Data Mining in Computer Science Education (CSEDM) Workshop in conjunction with the 11th International Conference on Educational Data Mining (EDM2018)*. Buffalo, New York.
- C27. Eagle, J., Carmichael, T., Stokes, J., Blink, M., Stamper, J., & Levin, J. (2018). Predictive Student Modeling for Interventions in Online Classes. In *Proceedings of the 11th International Conference on Educational Data Mining (EDM2018)*. Pp.619-624.
- C28. Carmichael, T., Blink, M., Stamper, J., Gieske, E. (2018). Linkage Objects for Generalized Instruction in Coding (LOGIC). In *Proceedings of the Thirty-First International Flairs Conference, Special Track on Intelligent Learning Technologies (FLAIRS 2018)*. pp. 443-446
- C29. Eagle, J., Corbett, A., Stamper, J., & McLaren, B. (2018). Predicting Individualized Learner Models Across Tutor Lessons. In *Proceedings of the 11th International Conference on Educational Data Mining (EDM2018)*. Pp. 474-478.
- C30. Diana N., Stamper J., Koedinger K. (2018) An Instructional Factors Analysis of an Online Logical Fallacy Tutoring System. In *Penstein Rose, C. et al. (eds) Artificial Intelligence in Education. AIED 2018. Lecture Notes in Computer Science, vol 10947*. Springer.
- C31. Diana, N., Eagle, M., Stamper, J., Grover, S., Bienkowski, M., & Basu, S. (2018). Data-driven generation of rubric criteria from an educational programming environment. In *Proceedings of the 8th International Conference on Learning Analytics and Knowledge* (pp. 16-20). ACM.
- C32. Diana, N., Eagle, M., Stamper, J., Grover, S., Bienkowski, M., Basu, S. (2017) An instructor dashboard for real-time analytics in interactive programming assignments. In *Proceedings of the Seventh International Learning Analytics & Knowledge Conference*. Pg. 272-279.

- C33. Diana, N., Eagle, M., Stamper, J., & Koedinger, K. R. (2017). Teaching Informal Logical Fallacy Identification with a Cognitive Tutor. In *International Conference on Artificial Intelligence in Education* (pp. 605-608). Springer, Cham.
- C34. Eagle, M., Corbett, A., Stamper, J., McLaren, Baker, R., B., Wagner, A., MacLaren, B., Mitchell, A. (2016) Predicting Individual Differences for Learner Modeling in Intelligent Tutors from Previous Learner Activities. In *Proceedings of the 2016 Conference on User Modeling Adaptation and Personalization*. Pp. 55-63. **[Best Paper Award]**.
- C35. Eagle, M., Corbett, A., Stamper, J., McLaren, B., Wagner, A., MacLaren, B., Mitchell, A. (2016). Estimating individual differences for student modeling in intelligent tutors from reading and pretest data. In *Proceedings of the 13th International Conference on Intelligent Tutoring Systems*. Pp. 133-143. **[Best Paper Finalist]**.
- C36. Liu, R., Davenport, J., Stamper, J. (2016) Beyond Log Files: Using Multi-Modal Data Streams Towards Data-Driven KC Model Improvement. In *9th International Conference on Educational Data Mining (EDM2016)*. Pp. 436-441.
- C37. Fancsali, S., Ritter, S., Stamper, J., Berman, S. (2014) Personalization, Non-Cognitive Factors, and Grain-Size for Measurement and Analysis in Intelligent Tutoring Systems: Implications for GIFT. In *Generalized Intelligent Framework for Tutoring (GIFT) Users Symposium (GIFTSym2)*. Pg 123-134.
- C38. Stamper, J., Koedinger, K., McLaughlin, E. (2013) A Comparison of Model Selection Metrics in DataShop. In *Proceedings of the 6th International Conference on Educational Data Mining (EDM 2013)*. Memphis, USA. Jul 6-9, 2013. pp. 284-287.
- C39. Johnson, M., Eagle, M., Stamper, J., Barnes, T. (2013) An Algorithm for Reducing the Complexity of Interaction Networks. In *Proceedings of the 6th International Conference on Educational Data Mining (EDM 2013)*. Memphis, USA. Jul 6-9, 2013. pp. 248-251.
- C40. Koedinger, K., Stamper, J., McLaughlin, E.. (2013) Using data-driven discovery of better student models to improve student learning. *Proceeding of the 16th International Conference on Artificial Intelligence in Education (AIED2013)*.
- C41. Spacco J., Fossati, D., Stamper, J., and Rivers, K. (2013). Towards Improving Programming Habits to Create Better Computer Science Course Outcomes. In *Proceedings of the 18th Conference on Innovation and Technology in Computer Science Education (ITiCSE '13)*. ACM, New York, NY, USA.
- C42. Koedinger, K., McLaughlin, E., Stamper, J., Automated Student Model Improvement. In *Proceedings of the 5th International Conference on Educational Data Mining (EDM 2012)*. Chania, Greece. Jun 19-21, 2012. pp. 17-24. **[Best Paper Award]**
- C43. Jin, W., Barnes, T., Stamper, J., Eagle, M., Johnson, M., Lehmann, L. (2012) Program Representation for Automatic Hint Generation for a Data-Driven Novice Programming Tutor. In *Proceedings of the 11th International Conference on Intelligent Tutoring Systems(ITS2012)*. pp.304-309. Springer.
- C44. Stamper, J., Lomas, D., Ching, D., Ritter, S., Koedinger K., Steinhart, J. (2012) The Rise of the Super Experiment. In *Proceedings of the 5th International Conference on Educational Data Mining (EDM 2012)*. Chania, Greece. Jun 19-21. pp. 196-200.
- C45. Stamper, J., Lomas, D., Ching, D., Linch, K., Ritter, S. (2012) Internet Scale Experimental Design and Deployment for Educational Games using BrainPOP. In *Proceedings of the 8th Games + Learning + Society Conference (GLS 2012)*. Madison, WI. pp.257-281.
- C46. Stamper, J., Barnes, T., and Croy, M. (2011) Experimental Evaluation of Automatic Hint Generation for a Logic Tutor. In Kay, J., Bull, S. and Biswas, G. eds. *Proceedings of the 15th International Conference on Artificial Intelligence in Education (AIED2011)*. pp. 345-352. Berlin Germany:Springer Verlag. **[Best Paper Finalist]**
- C47. Stamper, J., Koedinger, K.R. (2011) Human-machine Student Model Discovery and Improvement Using DataShop. In Kay, J., Bull, S. and Biswas, G. eds. *Proceeding of the 15th International Conference on Artificial Intelligence in Education (AIED2011)*, pp. 353-360. Berlin Germany:Springer Verlag.
- C48. Stamper, J., Koedinger, K.R., Baker, R., Skogsholm, A., Leber, B., Demi, S., Yu, S., Spencer, D. (2011) Managing the Educational Dataset Lifecycle with DataShop. In Kay, J., Bull, S. and Biswas, G. eds. *Proceedings of the 15th International Conference on Artificial Intelligence in Education (AIED2011)*.
- C49. Kodeinger, K.R., Pavlik, P., Stamper, J., Nixon, T., Ritter, S. (2011). Fair Blame Assignment in Student Modeling, In *Pechenizkiy, M., Calders, T., Conati, C., Ventura, S., Romero, C., and Stamper, J. (Eds.)*

Proceedings of the 4th International Conference on Educational Data Mining (EDM 2011). pp. 91-100. Eindhoven, the Netherlands.

- C50. Stamper, J., Barnes, T., and Croy, M. (2010) Enhancing the Automatic Generation of Hints with Expert Seeding. In *Aleven, V., Kay, J., and Mostow, J eds. Proceeding of the 10th International Conference on Intelligent Tutoring Systems(ITS2010)*, vol. II, pp. 31-40. Berlin, Germany: Springer Verlag. **[Best Student Paper]**
- C51. Stamper, J. Barnes, T. (2009) An Unsupervised, Frequency-based Metric for Selecting Hints in an MDP-based Tutor. 2nd Intl. Conf. on Educational Data Mining (EDM 2009), Cordoba, Spain, pp. 180-189.
- C52. Barnes, T., Stamper, J. (2008). Toward Automatic Hint Generation for Logic Proof Tutoring Using Historical Student Data. In E. Aimeur, & B. Woolf (Eds.) *Proceedings of the 9th International Conference on Intelligent Tutoring Systems (ITS 2008)*, pp. 373-382. Berlin, Germany: Springer Verlag. **[Best Paper Finalist]**
- C53. Barnes, T., Stamper, J., Croy, M., Lehman, L. (2008). A Pilot Study on Logic Proof Tutoring Using Hints Generated from Historical Student Data. In R. Baker, T. Barnes, J. Beck (Eds.) *Proceedings of the 1st International Conference on Educational Data Mining (EDM 2008)*, pp. 197-201. Montreal, Canada.
- C54. Barnes, T., Stamper, J. (2007). Toward the extraction of production rules for solving logic proofs. In C. Heiner, T. Barnes, & N. Heffernan (Eds.) *Proceedings of the 13th International Conference on Artificial Intelligence in Education, Educational Data Mining Workshop (AIED2007)*, pp. 11-20. Los Angeles, CA.
- C55. Stamper, J., Carmichael, T. (2007). A Complex Adaptive System Approach to Predictive Data Insertion for Missing Student Data. In *Proceedings of the 3rd Int. Conference on Computer Blended Learning (ICBL 2007)*, Florinopolis, Brazil, May 2007. Kassel University Press.
- C56. Stamper, J. (2006). Automating the Generation of Production Rules for Intelligent Tutoring Systems. In *Proceedings of the 9th International Conference on Interactive Computer Aided Learning (ICL2006)*, Villach, Austria. Kassel University Press.
- C57. Barnes, T., Stamper, J., Madhyastha, T. Comparative Analysis of Concept Derivation Using the Q-matrix Method and Facets. In J. Beck and T. Barnes (Eds.) *Proceedings of the AAAI 21th National Conference on Artificial Intelligence Educational Data Mining Workshop (AAAI2006)*, pp. 21-30. Menlo Park, CA: AAAI Press.

LIGHTLY REFEREED CONFERENCE/WORKSHOP/POSTER PAPERS

- U1. Moore, Steven, Stamper, John, Brooks, Christopher, Denny, Paul, and Khosravi, Hassan (2022). Learnersourcing: Student-Generated Content @ Scale. In *Proceedings of the Ninth ACM Conference on Learning @ Scale*. 259–262. Association for Computing Machinery.
- U2. Moore, S., Nguyen, H., and Stamper, J. (2020). Crowdsourcing Explanations for Improving Assessment Content and Identifying Knowledge Components. In *Proceedings of the 15th International Conference of the Learning Sciences*. 2627-2628. International Society of the Learning Sciences.
- U3. Diana, N., Hammer, J., Stamper, J., & Koedinger, K. (2020, November). Persuasion Invasion: Reducing Bias with Value-Adaptive Instruction. In *Extended Abstracts of the 2020 Annual Symposium on Computer-Human Interaction in Play (CHI Play 2020)* (pp. 50-53).
- U4. Stamper, John, Carvalho, Paulo, Moore, Steven, and Koedinger, Kenneth (2019). Tigris: An Online Workflow Tool for Sharing Educational Data and Analytic Methods. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 183.
- U5. Baik, Jason, Stamper, John, and Rangwala, Huzefa (2019). MOOC Effort Dashboard: An Interactive Web Dashboard Built in R. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 167.
- U6. Koedinger, Kenneth, Stamper, John, and Carvalho, Paulo (2019). Sharing and Reusing Data and Analytic Methods with LearnSphere. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 328-331.
- U7. Koedinger, Kenneth, Stamper, John, and Carvalho, Paulo (2019). LearnSphere: Learning Analytics Development and Sharing Made Simple. In *Companion Proceedings 9th International Conference on Learning Analytics & Knowledge*. 996.
- U8. Jiang, B., Li, Z., & Stamper, J. (2018). Programming Pathway Clustering Using Tree Edit Distance. In *Proceedings of the Educational Data Mining in Computer Science Education (CSEDM) Workshop in*

conjunction with the 11th International Conference on Educational Data Mining (EDM2018). Buffalo, New York.

- U9. Grover, S., Bienkowski, M., Basu, S., Eagle, M., Diana, N., Stamper, J. (2017) A framework for hypothesis-driven approaches to support data-driven learning analytics in measuring computational thinking in block-based programming. In *Proceedings of the Seventh International Learning Analytics & Knowledge Conference*. Pg. 530-531.
- U10. Eagle, M., Corbett, A., Stamper, J., McLaren, B. M., Baker, R., Wagner, A., & Mitchell, A. (2017). Exploring Learner Model Differences Between Students. In *International Conference on Artificial Intelligence in Education* (pp. 494-497). Springer, Cham.
- U11. Diana, N., Eagle, M., Stamper, J., Grover, S., Bienkowski, M., & Basu, S. (2017). Data-Driven Generation of Rubric Parameters from an Educational Programming Environment. In *International Conference on Artificial Intelligence in Education* (pp. 490-493). Springer, Cham.
- U12. Diana, N., Eagle, M., Stamper, J., Koedinger, K. (2016) Extracting Measures of Active Learning and Student Self-Regulated Learning Strategies from MOOC Data. In *9th International Conference on Educational Data Mining (EDM2016)*. Pp. 583-584.
- U13. Matsuda, N., Chandrasekaran, S., Stamper, J. (2016) How quickly can wheel spinning be detected? In *9th International Conference on Educational Data Mining (EDM2016)*. Pp. 607-608.
- U14. Carmichael, T., Hadzikadic, M., Stamper J., and Blink, M.J.: "A Multi-level Complex Adaptive System Approach for Modeling of Schools," In S. Trausan-Matu et al. (Eds.) *Proceedings of the 12th International Conference on Intelligent Tutoring Systems (ITS 2014)*, pp. 623-624, Springer, 2014.
- U15. Blink, M.J., Stamper, J., and Carmichael, T.: "SCALE: Student Centered Adaptive Learning Engine," In S. Trausan-Matu et al. (Eds.) *Proceedings of the 12th International Conference on Intelligent Tutoring Systems (ITS 2014)*, pp. 654-655, Springer, 2014.
- U16. Fancsali, S., Ritter, S., Stamper, J., Nixon, T. (2013) Toward "Hyper-Personalized" Cognitive Tutors. In *AIED 2013 Workshops Proceedings*. Volume 7, 71.
- U17. Hovemeyer, D., Hertz, M., Denny, P., Spacco, J., Papancea, P., Stamper, J., and Rivers, K. (2013). CloudCoder: building a community for creating, assigning, evaluating and sharing programming exercises (Poster). In *Proceedings of the 44th ACM technical symposium on Computer science education (SIGCSE '13)*. ACM, New York, NY, USA, 742-742.
- U18. Williams, J.J., Renkl, A., Koedinger, K.R., Stamper, J. (2013) Online Education: A Unique Opportunity for Cognitive Scientists to Integrate Research and Practice. In *Proceedings of the Cognitive Science Society*, pp. 113-114. Germany.
- U19. Lomas, D., Stamper, J., Muller, R., Patel, K., Koedinger, K. (2012) The Effects of Adaptive Sequencing Algorithms on Player Engagement within an Online Game. In *Proceeding of the 11th International Conference on Intelligent Tutoring Systems(ITS2012)*. pp.588-590. Springer.
- U20. Ritter, S., Nixon, T., Lomas, D., Stamper, J., Ching, D. (2012) Using Time Pressure to Promote Mathematical Fluency. In *Proceeding of the 11th International Conference on Intelligent Tutoring Systems(ITS2012)*.pp.669-670. Springer.
- U21. Stamper, J., Barnes, T., Croy, M. (2010). Using a Bayesian Knowledge Base for Hint Selection on Domain Specific Problems. In Baker, R.S.J.d., Merceron, A., Pavlik, P.I. Jr. (Eds.) *Proceedings of the 3rd International Conference on Educational Data Mining. (EDM 2010)*, pp. 327-328. Pittsburgh, PA. (poster)
- U22. Koedinger, K., Stamper, J. (2010). A Data Driven Approach to the Discovery of Better Cognitive Models. In Baker, R.S.J.d., Merceron, A., Pavlik, P.I. Jr. (Eds.) *Proceedings of the 3rd International Conference on Educational Data Mining. (EDM 2010)*, pp. 325-326. Pittsburgh, PA. (poster)
- U23. Barnes, T., Stamper, J. (2009) Utility in hint generation: Selection of hints from a corpus of student work. *14th Intl. Conf. on AI in Education (AIED)*, Brighton, UK, (poster)
- U24. Stamper, J., Barnes, T. (2008). The Hint Factory: Automatic Generation of Contextualized Help for Existing Computer Aided Instruction. In G. Gouarderes, & R.M. Vicari (Eds.) *Proceedings of the 9th International Conference on Intelligent Tutoring Systems Young Researchers Track*, pp. 71-78. Montreal, Canada.
- U25. Stamper, J., Barnes, T., Croy, M., Lehmann, L. (2008) The Validity of Providing Automated Hints in an ITS Using a MDP. In *Proceedings of the 23nd AAAI Conference on Artificial Intelligence (AAAI 2008)*, pp. 1830-1831. Menlo Park, CA: AAAI Press. (Poster)

- U26. Stamper, J., Barnes, T., Croy, M. (2007) Extracting Student Models for Intelligent Tutoring Systems. In Proceedings of the 22nd AAAI Conference on Artificial Intelligence (AAAI 2007), pp. 1900-1901. Menlo Park, CA: AAAI Press.
- U27. Stamper, J. (2007). Automating the Generation of Student Models for Intelligent Tutoring Systems. In R. Luckin, K. Koedinger, & J. Greer (Eds.), Proceedings of the 13th International Conference on Artificial Intelligence in Education (AIED 2007). pp. 701-702. Amsterdam, the Netherlands: IOS Press.
- U28. Howitt, I., Stamper, J., Raja, A., Mappillai, V., Predictive Protocol Management with Contingency Planning for Wireless Sensor Networks. In Proceedings of The 2nd IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2005), pp. 160-162, 2005.

GRANTS AND SUPPORT

National Science Foundation, Cyberinfrastructure for Sustained Scientific Innovation (CSSI). Collaborative Research: Frameworks for Intelligent Adaptive Experimentation: Enhancing and Tailoring Digital Education. Stamper, J. (PI), Bier, N. (Co-PI), Williams, J. (Co-PI), Carver, J. (Co-PI), Ritter, S. (Co-PI). 2022-2027. \$2,199,958.

Navy Small Business Technology Transfer (STTR) Phase II. Navy Real-time Knowledge Sharing (RKS). Carney, J. (PI), Stamper, J. (Co-PI). 2023-2025. Total: \$1,000,000, CMU Award: \$300,000.

Jacobs Foundation. Leveraging Industry EdTech Data for Scientific Advancement. Ogan, A. (PI), Stamper, J. (Co-PI). 2021-2022. \$57,000.

National Science Foundation, Improving Undergraduate STEM Education. Community-engaged Courseware for STEM Success (CCSS). Bier, N. (PI), Stamper, J. (Co-PI), Nicole Simon (Co-PI), Pamela Pape-Lindstrom (Co-PI). 2021-2023. \$1,747,187.

Navy Small Business Technology Transfer (STTR) Phase I. Navy Real-time Knowledge Sharing (RKS). Carney, J. (PI), Stamper, J. (Co-PI). 2021-2022. Total: \$239,393, CMU Award: \$71,927.

California Education Learning Labs (CELL). Community Sourced, Data-Driven Improvements to Open, Adaptive Courseware. Jenkins, C. (PI), Robson, N. (Co-PI) Herckis, L. (Co-PI), Pardos, Z. (Co-PI) Bier, N. (Research Advisor), Stamper, J. (Research Advisor), 2019-2022. \$1,300,000.

National Science Foundation, Data Infrastructure Building Blocks (DIBBs). Building a Scalable Infrastructure for Data-Driven Discovery and Innovation in Education. Koedinger, K. (PI), Stamper, J. (Co-PI). Rose, C. (Co-PI). 2015-2020. \$4,830,819.

National Science Foundation, Cyberlearning and Future Learning Technology. EXP: Understanding Computational Thinking Process and Practices in Open-Ended Programming Environments. Grover, S. (PI), Stamper, J. (Co-PI), Bienkowski, M. (Co-PI). 2015-2017. Total: \$549,882, CMU Award: \$119,818.

National Science Foundation, Data Intensive Research to Improve Teaching and Learning – An Ideas Lab to Foster Transformative Approaches to Teaching and Learning. Collaborative Research: Learning Linkages: Integrating data streams of multiple modalities and timescales. Stamper, J. (PI), Sherin, B. (Co-PI), McNamara, D. (Co-PI), Davenport, J. (Co-PI). 2014-2017. Total: \$706,534, CMU Award: \$235,354.

National Science Foundation, Data Intensive Research to Improve Teaching and Learning – An Ideas Lab to Foster Transformative Approaches to Teaching and Learning. Data-Driven Methods to Improve Student Learning from Online Courses. Matsuda, N. (PI), Koedinger, K. (Co-PI) Stamper, J. (Co-PI). Bier, N. (Co-PI). 2014-2017. \$504,740.

National Science Foundation, Research on Education and Learning (REAL). Knowing What Students Know: Using Educational Data Mining to Predict Robust STEM Learning. McClaren, B. (PI), Stamper, J. (Co-PI) 2014-2017. \$1,487,345.

National Science Foundation, Small Business Technology Transfer (STTR).

TutorGen SCALE - The Student Centered Adaptive Learning Engine. Blink, M. (PI), Stamper, J. (Co-PI) 2014-2015. Total: \$225,000, CMU Award: \$71,425.

Advanced Distributed Learning (ADL), Army Research Lab (ARL).

Hyper-personalized Intelligent Tutors. Ritter, S. (PI), Stamper, J. (Co-PI) 2013-2015. Total: \$1,381,519, CMU Award: \$279,895.

Next Generation Learning Challenge Wave I.

The Mathematics Fluency Data Collaborative. Ritter, S. (PI), Stamper, J. (Co-PI), Barnes, T. (Co-PI), Plass, J. (Co-PI) 2011-2012. \$746,798.

CITATIONS AND AWARDS

- 15th International Conference on Intelligent Tutoring Systems (ITS 2019), Best Paper Honorable Mention
- 2016 Conference on User Modeling and Adaptation and Personalization (UMAP 2016), Best Paper Award
- 13th International Conference on Intelligent Tutoring Systems (ITS 2016), Best Paper Honorable Mention
- 5th International Conference on Educational Data Mining (EDM 2012), Best Paper Award
- 15th International Conference on Artificial Intelligence in Education (AIED 2011), Best Paper Honorable Mention
- 10th International Conference on Intelligent Tutoring Systems (ITS 2010), Best Paper Honorable Mention
- 10th International Conference on Intelligent Tutoring Systems (ITS 2010), Best Student Paper Award
- 10th International Conference on Intelligent Tutoring Systems (ITS 2010), Outstanding Reviewer Award
- 9th International Conference on Intelligent Tutoring Systems (ITS 2008), Best Paper Honorable Mention

KEYNOTE TALKS

- Using Artificial Intelligence and Big Data for the Continuous Improvement of Educational Technology, 24th Annual Educational Symposium: New Trends in Education, Antalya, Turkey (January, 2020).
- Beyond Automatic Hint Generation, AIAED Conference, Beijing, China (May, 2019).
- Continuous Improvement of Educational Technology through Discoveries with Big Data, EdCrunch, Conference, Moscow (October, 2018).
- LearnSphere and DataShop: Enabling Data Fusion across Diverse Data Sources, Opening Institute for Application of Learning Science and Educational Technology, Singapore, (July 2017).
- Using Data-Driven Discovery Techniques for the Design and Improvement of Educational Systems, MedBiquitous Annual Conference, Baltimore, MD, (April, 2013).
- The Educational Data Mining Challenge, Reflections on the 2010 KDD Cup, Keynote for the 4th International Conference on Educational Data Mining, Eindhoven, Netherlands, (July 2011).
- DataShop: An Open Repository of Educational Data, Keynote for the 1st workshop on Data Sets for Technology Enhanced Learning at the 2nd STELLAR Alpine Rendez-Vous in La Clusaz, France (March 2011).

INVITED TALKS

- Educational Data Science and Applied Learning Sciences, Presentation to the US Navy, Carnegie Mellon University (June, 2022).
- Learner sourcing with Artificial Intelligence, Panel Discussion Empowering Learners with AI, Virtual (December, 2021).
- Closing the Loop with Learning Analytics, Learning Analytics Summer Institute (LASI 2021), Virtual (June 2021).
- Continuous Improvement of Educational Technologies with Big Data, UC Berkeley, Virtual (March, 2021)
- Artificial Intelligence in Educational Technologies, 3rd Deep Dive meeting of the Mastercard Foundation Edtech Fellows (October, 2020).
- Closing the Loop with Learning Analytics, Learning Analytics Summer Institute (LASI 2020), New York (June 2020).

- Artificial Intelligence in Education, Presentation to the Scientific Advisory Board of the United States Air Force, Washington, DC. (May, 2019).
- Continuous Improvement of Educational Technology through Discoveries with Big Data, Big Data and Smart Evaluation Summit, Nanjing, China (December, 2018).
- Artificial Intelligence in Education, Presentation to K12 Board of Directors Meeting (October, 2018).
- Enabling Data Fusion across Diverse Data Sources, Gates Foundation Visit, Pittsburgh (November, 2017).
- The Science of Learning, Montour School District Leadership Summit, Pittsburgh (August, 2016).
- LearnSphere: Enabling Data Fusion across Diverse Data Sources, Learning Analytics Summer Institute, Ann Arbor, Michigan (June, 2016).
- Improving Educational Technology through Discoveries in Big Data, University of Michigan, Ann Arbor, Michigan (February, 2016).
- Tutorgen's Student Centered Adaptive Learning Engine (SCALE), Launch CMU, Pittsburgh (October, 2015).
- Big Data and Learning: building the LearnSphere, IRB, Privacy and Big Data Summit, Arlington, Virginia (November, 2014).
- Learning at Scale, 2nd Learning Analytics Summer Institute (LASI 2014), Harvard University (July, 2014).
- Learning Curve Analysis, 1st Learning Analytics Summer Institute (LASI 2013), Stanford University (July, 2013).
- The Future of Educational Research is Big Data!, EdLab Speaker Series Talk, Teachers College, Columbia University, New York, NY, (Jan, 2013).
- Using DataShop for Continuous Course Improvement, Open Learning Initiative Hands On Workshop, Pittsburgh, PA, (Oct, 2012).
- DataShop: An Educational Data Mining Platform for the Learning Science Community, Open Learning Initiative Hands On Workshop, Pittsburgh, PA, (July, 2012).
- DataShop: An Educational Data Mining Platform for the Learning Science Community, NYU Consortium for Research and Evaluation of Advanced Technologies in Education, New York, NY, (May, 2012).
- Educational Data Mining meets Learning Analytics, 2nd Conference on Learning Analytics and Knowledge Panel Discussant, Vancouver, Canada, (April, 2012).
- Online Learning and Gaming: Seeking Evidence of Impact, Miami University Computer Science Alumni Conference, Oxford, OH, (Mar 2012).
- The Challenges of Evaluating Game Log Data, Educause Learning Initiative (ELI) annual meeting, Austin TX, (Feb 2012).
- Transformational Model of Translational Research that Leverages Educational Technology for Fast Data-Discovery Feedback Loops, Organization of Economic Cooperation and Development OECD/NSF Workshop, Paris France, (Jan 2012).
- Data-Driven Discovery of Cognitive Models for the Design of Better Intelligent Tutors, UNC Charlotte, (Jan 2012).
- Concerns of Data Sharing Panel at the National Academy of Education summit on Adaptive Educational Technologies, NAED Washington DC (Dec 2011).
- PSLC DataShop: Data Coding, Management, and Sharing, OpenShapa to Open Sharing Workshop, NSF Washington DC, (Sept 2011).
- DataShop Repository for Educational Data, National Academy of Education, (May 2011).
- Securing OpenInsight, Revelation Software User Conference, Las Vegas, (April 2010).
- OI to SQL Primer, Revelation Software Users Conference, Las Vegas, (May 2008).
- Exploiting the System Tables, Revelation Software Users Conference, Seattle, WA, (Jan 2007).
- Import/Export Strategies for OpenInsight, Revelation Software Users Conference, New Orleans, LA, (Jun 2004).
- Managing IT as a Solutions Provider, Seminar for Organizational Leadership, College of Mount Saint Joseph, Cincinnati, OH, (Oct 2002).
- Reporting with Multi-Dimensional Databases, Panel Discussion, International Spectrum Conference, Cincinnati, OH, (Sept 2002).
- Enterprise Resource and Planning, Panel Discussion, University of Cincinnati, Cincinnati, OH, (Mar 2002).

SEMINARS & COLLOQUIA

- Data-Driven Discovery of Cognitive Models for the Design of Better Intelligent Tutors, Miami University, (Mar 2012).
- Automatic Generation of Intelligent Tutoring Capabilities using Student Data, Intelligent Systems Program AI Forum, University of Pittsburgh, (Dec 2010).
- The Hint Factory: Automatic Generation of Contextualized Help for Existing Computer Aided Instruction, Pittsburgh Science of Learning Center Seminar, Carnegie Mellon University, (Oct 2008).

CONFERENCE AND WORKSHOP COMMITTEES

- 16th International Conference on Educational Data Mining, EDM 2023 (Senior Program Committee)
- 13th Conference on Learning Analytics and Knowledge, LAK2023 (Senior Program Committee)
- 3rd Annual Meeting of the International Society of the Learning Sciences, ISLS 2023 (Senior Program Committee)
- Learnersourcing: Student-generated Content @ Scale, L@S 2022 Workshop (Organizer)
- 15th International Conference on Educational Data Mining, EDM 2022 (Senior Program Committee)
- 12th Conference on Learning Analytics and Knowledge, LAK2022 (Program Committee)
- 14th International Conference on Educational Data Mining, EDM 2021 (Senior Program Committee)
- 11th Conference on Learning Analytics and Knowledge, LAK2021 (Program Committee)
- 29th International Conference on Computers in Education, ICCE 2021 (Program Committee)
- 13th International Conference on Educational Data Mining, EDM 2020 (Senior Program Committee)
- 21th International Conference on AI in Education, AIED 2020 (Senior Program Committee)
- 10th Conference on Learning Analytics and Knowledge, LAK2020 (Program Committee)
- 12th International Conference on Educational Data Mining, EDM 2019 (Senior Program Committee)
- 20th International Conference on AI in Education, AIED 2019 (Senior Program Committee)
- 9th Conference on Learning Analytics and Knowledge, LAK2019 (Program Committee)
- Workshop on LearnSphere at LAK 2019 (Chair)
- 11th International Conference on Educational Data Mining, EDM 2018 (Senior Program Committee)
- 19th International Conference on AI in Education, AIED 2018 (Senior Program Committee)
- 8th Conference on Learning Analytics and Knowledge, LAK2018 (Program Committee)
- Workshop on LearnSphere at LAK 2018 (Chair)
- 10th International Conference on Educational Data Mining, EDM 2017 (Senior Program Committee)
- 18th International Conference on AI in Education, AIED 2017 (Senior Program Committee)
- 7th Conference on Learning Analytics and Knowledge, LAK2017 (Program Committee)
- 13th International Conference on Intelligent Tutoring Systems, ITS2016 (Program Chair)
- 9th International Conference on Educational Data Mining, EDM 2016 (Program Committee)
- 6th Conference on Learning Analytics and Knowledge, LAK2016 (Program Committee)
- 8th International Conference on Educational Data Mining, EDM 2015 (Program Committee)
- 17th International Conference on AI in Education, AIED 2015 (Program Committee)
- 5th Conference on Learning Analytics and Knowledge, LAK2015 (Program Committee)
- 7th International Conference on Educational Data Mining, EDM 2014 (Program Chair)
- AAAI 2014 Tutorial on Improving Education with Data (Chair)
- 12th International Conference on Intelligent Tutoring Systems, ITS 2014 (Program Committee)
- 4th Conference on Learning Analytics and Knowledge, LAK2014 (Program Committee)
- 6th International Conference on Educational Data Mining, EDM 2013 (Program Committee)
- 16th International Conference on AI in Education, AIED 2013 (Sponsorship Chair, Senior Program Committee)
- MOOCShop Workshop at AIED 2013 (Program Committee)
- Workshop on AI Supported Education in Computer Science at AIED 2013 (Program Committee)
- Workshop on Formative Feedback in Interactive Learning Environments at AIED 2013 (Program Committee)
- Learning Curve Tutorial at the 3rd Conference on Learning Analytics and Knowledge, LAK2013 (Chair)
- 3rd Conference on Learning Analytics and Knowledge, LAK2013 (Program Committee)

- 5th International Conference on Educational Data Mining, EDM 2012 (Conference Chair)
- 11th International Conference on Intelligent Tutoring Systems, ITS 2012 (Program Committee)
- DataShop Import Tutorial at AIED 2011 (Chair)
- 15th International Conference on AI in Education, AIED2011 (Senior Program Committee)
- 4th International Conference on Educational Data Mining, EDM2011 (Poster/Demo Co-Chair, Program Committee)
- 2011 KDD Workshop on Knowledge Discovery in Educational Data (Chair)
- AAAI 2010 Fall Symposium on Complex Adaptive Systems (Program Committee)
- 3rd International Conference on Educational Data Mining , EDM2010 (Local Chair)
- 2010 KDD Cup Workshop on Educational Data Mining (Co-Chair)
- DataShop Tutorial at 10th International Conference on ITS (Chair)
- 10th International Conference on Intelligent Tutoring Systems (Program Committee)
- AAAI 2009 Fall Symposium on Complex Adaptive Systems (Program Committee)
- 1st International Conference on Educational Data Mining, Montreal, Canada, Summer 2008 (Reviewer)
- 13th International Conference on AI in Education, Workshop on Educational Data Mining, AIED2007 (Program Committee)
- 21st National Conference on AI, Workshop on Educational Data Mining, 2006 (Reviewer)

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

- International Educational Data Mining Society (IEDMS)
- AI in Education Society
- Society for Learning Analytics Research (SOLAR)

PROFESSIONAL CERTIFICATIONS

- Microsoft Certified Systems Engineer (MCSE)
- Microsoft Certified Database Administer (MCDBA)

OTHER

- Elected Board of International Educational Data Mining Society (IEDMS) (July 2014-2020)
- Elected Treasurer of International Educational Data Mining Society (IEDMS) (July 2013-2017)
- Building the Field of Learning Analytics, Workshop meeting , Stanford University, October 2012 (Participant)
- Intel Science and Engineering Fair, Pittsburgh, PA, May 2012 (Judge in Computer Science)
- Carnegie Mellon Leadership Symposium, January 2011 (Participant)
- KDD CUP 2010 Challenge associated with ACM SIGKDD (Co-Chair)
- 6th Annual Pittsburgh Science of Learning Center LearnLab Summer School, Carnegie Mellon University, Summer 2010 (Mentor – EDM Track)
- Interactive Event – DataShop, 10th International Conference on Intelligent Tutoring Systems (ITS 2010)
- Fourth Annual Pittsburgh Science of Learning Center LearnLab Summer School, Carnegie Mellon University, Summer 2008 (Participant)
- Chautauqua on Teaching Communication Skills in the Software Engineering Curriculum, NSF CPATH supported, at Miami University, Summer 2008 (Participant)
- College of Computing and Informatics Graduate Curriculum Committee, University of North Carolina at Charlotte, Sept 2007 – Aug 2009 (Committee Member)
- Doctoral Consortium, 13th International Conference on AI in Education, Los Angeles, Summer 2007 (Participant)
- NSF EAPSI Fellow, Sung Kyun Kwan University, Suwon Korea, Summer 2007 (Participant)
- Fourth Americas School on Agents and Multiagent Systems, Carnegie Mellon University, Summer 2005 (Participant)
- Computer Information Systems Advisory Board, College of Mount Saint Joseph, Aug 2002 – Aug 2004 (Committee Member)