

Douglas Lee Baldwin

Curriculum Vitae

August 2023

Born: April 27, 1958
Birthplace: Hanover, NH
Nationality: US

Address: Department of Mathematics
SUNY Geneseo
1 College Cir.
Geneseo, NY 14454

EDUCATION:

B.S., Computer Science (Summa Cum Laude, Phi Beta Kappa), Yale University, May 1980.
M.S., Computer Science, Yale University, December 1981.
Ph. D., Computer Science, Yale University, May 1985. Dissertation Title: “Automatic Evaluation of Design Choices in Digital Controller Synthesis.” (Dr. Joseph Fisher, supervisor) National Science Foundation Graduate Fellow Sept. 1981 through Aug. 1984.

PROFESSIONAL EXPERIENCE:

2013 – Professor, Department of Mathematics, SUNY Geneseo
2011 – 2013 Professor, Department of Computer Science, SUNY Geneseo
2005 – 08 Chair, Department of Computer Science, SUNY Geneseo.
2003 – 05 Acting Chair, Department of Computer Science, SUNY Geneseo.
1997 – 99 Chair, Department of Computer Science, SUNY Geneseo.
1994 – 2011 Associate Professor, Department of Computer Science, SUNY Geneseo.
1993 – 94 Acting Chair, Department of Computer Science, SUNY Geneseo.
1990 – 94 Assistant Professor, Department of Computer Science, SUNY Geneseo.
1985 – 89 Assistant Professor, Department of Computer Science, University of Rochester.
1984 – 85 Instructor, Department of Computer Science, Yale University.

PROFESSIONAL SOCIETIES:

2017 – Mathematical Association of American (MAA)
2009 – Council on Undergraduate Research (CUR)
2002 – ACM Special Interest Group on Computer Graphics (SIGGRAPH)
1999 – 2021 Liberal Arts Computer Science Consortium (LACS)
1992 – ACM Special Interest Group on Computer Science Education (SIGCSE)
1987 – 2021 ACM Special Interest Group on Programming Languages (SIGPLAN)
1985 – 2020 IEEE Computer Society
1981 – Association for Computing Machinery

STUDENT RESEARCH SUPERVISED:

Algorithmic Bias. Feb. 2021 – May 2021. Riley Grossman. Presented at SUNY Geneseo GREAT DayS, Apr. 2021.
Animating a Model of Harmonic Motion. Jan. 2019 – May 2020. Salvador Galarza, Jack Truckenmiller. Presented at SUNY Geneseo GREAT Day, Apr. 2019.

Analyzing Sentiment of Biology Class Surveys. Jan. 2018 – May 2018. Gabrielle Angeloro, Julia Witkowski, Tolulope Olatunbosun. Presented at SUNY Geneseo GREAT Day, Apr. 2018.

Boundary Detection with Cellular Automata. Sept. 2016 – May 2017. Walter Gerych. Presented at Consortium for Computing Sciences in Colleges Northeastern conference, Apr. 2017; SUNY Geneseo GREAT Day, Apr. 2017.

Algorithmic Modeling of Crystal Aggregates. Sept. 2015 – May 2019. Gabrielle Angeloro, Amelia Mindich, Steve Sicari, James Jasinski, BethAnna Jones. <https://wiki.geneseo.edu/display/cgraphics>. Presented at SUNY Geneseo GREAT Day, Apr. 2019.

Animations from Still Images, May 2013 – Dec. 2013. Michael Pilosov. Presented at COPLAC regional conference, Oct. 2013; SUNY Geneseo GREAT Day Apr. 2014.

Animation Software for Visualizing Differential Equations, Jan. 2009 – May 2009, Jan. 2010 – May 2010. Malcolm Kotok. Presented at SUNY Geneseo GREAT Day, Apr. 2010, Apr. 2009.

Algorithmic Description of Three-Dimensional Geometry, Feb. 2008 – May 2012. Justin Hagstrom, Heather Warren, Eric Squires, Elizabeth Skiba. Presented at ACM Student Research Competition, Mar. 2012; Omega Laser Facility Users Group Workshop, Apr. 2012.

Constructive Solid Geometry, June 2003 – May 2013. Genevieve Herres, Kristen Johnson, Heather Warren, Eric Squires, Nicole Loiacano, Hieu Tran, Jeffrey Nathanson, Marcos Davila. Presented at Consortium for Computing Sciences in Colleges Northeastern Conference, Apr. 2011, Apr. 2007, Apr. 2004; SUNY Geneseo GREAT Day, Apr. 2013, Apr. 2011, Apr. 2010, Apr. 2007; Consortium for Computing Sciences in Colleges Eastern Conference, Oct. 2009; SUNY Geneseo Undergraduate Scholars Symposium, Apr. 2006; SUNY Geneseo Computer Science Colloquium, Apr. 2005.

Modeling D-T Fusion in a Deuterated Polyethylene Film. Jan. 2003 – May 2004. Elena Kornienko. Presented at SUNY Geneseo Undergraduate Scholars Symposium, April 2004; Consortium for Computing Sciences in Colleges Midwestern Conference, Oct. 2003.

Visualization Software for Particle Physics. June 2001 – May 2013. Jacob Clements, Cindy Wong, Elena Kornienko, Genevieve Herres, Hui Jiang, Brian Aloisio, Ryan Kinal, Justin Hagstrom, Heather Warren, Eric Squires, Nicole Loiacano, Hieu Tran, Elizabeth Skiba. Presented at Consortium for Computing Sciences in Colleges Northeastern Conference, Apr. 2009; SUNY Geneseo GREAT Day, Apr. 2009, Apr. 2007; SUNY Conversations in the Disciplines workshop “The Big Impact of Small Accelerators,” May 2008; ACM Student Research Competition, Mar. 2007; SUNY Geneseo Undergraduate Science and Math Symposium, Apr. 2003, Apr. 2002; SUNY Geneseo Student Poster Session, Nov. 2002, Nov. 2001; Consortium for Computing Sciences in Colleges Eastern Conference, Oct. 2002; Geneseo Computer Science Colloquium, Dec. 2001.

The Arithmetic Power of Certain Formal Languages. Jan. 2000 – May 2001. Albert Goldfain. Presented at the Consortium for Computing in Small Colleges Northeastern Conference, April 2001; Geneseo Student Poster Session, Nov. 2000; Geneseo Undergraduate Science and Math Symposium, April 2000.

TEACHING EXPERIENCE:

Calculus 3, Introduction to Proof, Computer Graphics, Critical Writing, Theory of Computation, Computational Complexity, Calculus 1, Calculus 2, Object Oriented Programming, Mathematical Programming, Research & Presentation Seminar, Mathematics for Elementary Education 2, Theory of Programming Languages, Networking, Analysis of Algorithms II, CS0, CS1, Analysis of Algorithms I, Software Engineering.

AWARDS:

2011. SUNY Chancellor’s Award for Excellence in Faculty Service.
 2007. Semester-long “Honoring Geneseo’s Teachers” display sponsored by College Teaching and Learning Center.

DEPARTMENTAL, COLLEGE, AND PROFESSIONAL SERVICE:

12/22 – 4/23 Chair, Administrative Assistant Search Committee (Department)
 9/22 – 8/23 Member, GLOBE Committee (College)
 9/22 – 8/23 Member, Departmental Committee (Department)
 9/22 – 8/23 Chair, Scholarships Committee (Department)
 5/22 – 4/23 Member, Geneseo team at AAC&U Institute on General Education and Assessment (College)
 4/22 – Member, Think Tank on the First Year Writing Seminar (College)
 9/21 – Secretary, Alpha Delta of New York chapter of Phi Beta Kappa (College)
 9/21 – 5/22 Member, Provost’s Think Tank on Faculty Evaluation (College)
 9/20 – Advisor, PRISM — Geneseo student math organization (Department)
 7/20 – 9/22 Faculty Affiliate, Center for Digital Learning (College)
 7/20 – 3/22 Program Committee Member, “Innovations and Opportunities in Liberal Arts Computing Education,” mini-conference affiliated with the 2021 and 2022 SIGCSE Technical Symposium on Computer Science Education, Mar. 8-9, 2021; Mar. 2022.
 10/19 – 8/23 Chair, General Education Committee (College)
 9/19 – 3/21,
 1/14 – 3/15 Member, Program Review Steering Committee (Department)
 9/18 – 9/20,
 9/14 – 10/16,
 9/10 – 9/12 President, Alpha Delta of New York chapter of Phi Beta Kappa (College)
 9/18 – 5/19 Member, Assessment Committee (Department)
 4/17 – 5/22 Member, Curriculum Design Working Group (College)
 9/16 – 5/22 Associate Chair, Department of Mathematics (Department)
 5/16 – 5/20 Treasurer, College Senate (College)
 5/16 – 11/16 Chair, Search Committee for Director of Milne Library (College)
 12/15 – 5/21 Co-Convener, SIGCSE Committee on Computing Education at Liberal Arts Colleges (Professional)
 9/15 – 5/16 Member, Undergraduate Research Committee (Department)
 1/14 – 12/21,
 1/09 – 12/10 Alternating Member and Chair, Faculty Personnel Committee (College)
 8/14 – Chair, Provost’s Advisory Committee on Technology (College)
 9/14 – 12/14 Member, Excellence Awards Committee (College)
 8/14 – 8/22 Member, Curriculum Committee (Department)
 12/13 – 12/15 Member, Committee on Nominations and Elections (College)
 1/13 – 1/17 Reviewer, ACM SIGCSE Conference on Innovation and Technology in Computer Science Education (professional)
 10/12 – Member, ACM Student Research Competition Steering Committee (Professional)
 9/12 – Member, General Education Committee and co-coordinator for first-year writing course (College)
 9/12 – 9/14 Vice President, Alpha Delta of New York chapter of Phi Beta Kappa (College)
 7/12 – 12/13 Member, MAA CUPM Program Study Group on Computing and Computational Science (Professional)
 6/12 – 5/22 Reviewer, *ACM Inroads* magazine (professional)
 2/12 – 5/12 Member, MAA CUPM Curriculum Guide Course Subgroup in Discrete Mathematics (Professional)
 12/11 – 12/18 Reviewer, Council on Undergraduate Research “Posters on the Hill” (Professional)
 11/11 – 12/12 Member, Excellence Awards Committee (College)

- 9/10 – 9/18 Reviewer, SIGCSE Symposium (Professional)
- 7/10 – 6/13 Treasurer, ACM Special Interest Group on Computer Science Education (Professional)
- 12/09 – 5/12 Member, Middle States Self-Study Steering Committee (College)
- 6/09 – 12/09 Member, Task Force on Rethinking the Course Load (College)
- 8/08 – 3/10 Guest Editor (w/ A. Brady), *ACM Transactions on Computing Education* Special Issue on Computer Science in the Liberal Arts (Professional)
- 11/07 – 10/08 Member, OOPSLA 2008 Educators Symposium Program Committee (Professional)
- 9/07 – 5/09 Member, College Senate (College)
- 8/07 – 8/14 Editor, Computer Science Department Alumni Newsletter/Newsblog (Department)
- 7/07 – 6/10 Member-at-Large, Governing Board, ACM Special Interest Group on Computer Science Education (Professional)
- 1/07 – 9/07 Colloquia and Special Events Coordinator (Department)
- 3/06 – 3/19 Judge, ACM Student Research Competition (Professional)
- 4/05 – Member, Provost's Advisory Committee on Information Technology (College)
- 3/04 – 3/06 Conference Co-Chair, SIGCSE 2006 Symposium (Professional)
- 3/04 – 3/05 Program Co-Chair, SIGCSE 2005 Symposium (Professional)
- 1/04 – 4/06 Founding President, Alpha Delta of NY chapter of Phi Beta Kappa (College)
- 6/03 – 6/07 Co-chair, SIGCSE Committee on the Implementation of a Discrete Mathematics Course (Professional)
- 5/03 – 5/04 Vice-Chair, Research Council (College)
- 9/01 – 6/20 Member, Research Council (College)
- 1/01 – 4/04 Member, Organizing Committee, Undergraduate Symposium in Science and Mathematics (College)
- 6/00 – 6/09 Member, Academic Standards Committee (College)
- 4/00 – 1/04 Chair, Phi Beta Kappa Application and Organizing Committees (College)
- 7/99 – 10/18 Co-organizer, Working Group on Integrating Mathematical Reasoning into Computer Science Curricula (www.math-in-cs.org) (Professional)
- 2/97 – 3/99 Member, Program Committee, SIGCSE Symposium (Professional)

MAJOR GRANT SUPPORT:

- “Nuclear Diagnostics of LLE Experiments.” Co-PI. University of Rochester Laboratory for Laser Energetics/Center for Optoelectronic Imaging subcontract 412161G, \$1,150,074. Oct. 2002 – Aug. 2013.
- “Teaching the Three-Fold Introductory Curriculum in Computer Science”. PI. National Science Foundation grant number DUE-9455137, \$60,558. Feb. 1995 – July 1997.
- “An Insight-Based Computer Science Curriculum”. Co-PI. U. S. Dept. of Education grant number P116B20753, \$149,000. Sept. 1992 – Sept. 1995.
- “Development of Science of Computing 1 and 2 Courses at SUNY Geneseo”. PI. National Science Foundation grant number USE-9156000, \$49,043. Feb. 1992 – Jan. 1994.
- “Development of Science of Computing 1 and 2 Courses at SUNY Geneseo”. PI. National Science Foundation grant number USE-9150930, \$54,900. July 1991 – Mar. 1993.

PUBLICATIONS:

(* = undergraduate student co-author; † = graduate student co-author)

Books

Baldwin, D. and G. Scragg. *Algorithms and Data Structures: The Science of Computing*. Charles River Media, June 2004.

Chapters in Edited Volumes

Skuse, G., D. Walzer, K. Tomasek, D. Baldwin, and M. Bailey. "Computer Science and the Liberal Arts: Hidden Synergies and Boundless Opportunities," in Fee, Holland-Minkley, and Lombardi (eds.) *New Directions for Computing Education: Embedding Computing Across Disciplines*, Springer International Publishing, 2017.

Articles

- Baldwin, D. "Toward Equitable Grading via Distributed Oral Exams and Mastery Grading," Under review.
- Baldwin, D., Holland-Minkley, A., and Braught, G. "Report of the SIGCSE Committee on Computing Education in Liberal Arts Colleges," *ACM Inroads*, June 2019.
- Baldwin, D. and M. Weber*. "Fast Ray-Triangle Intersections by Coordinate Transformation," *Journal of Computer Graphics Techniques*, 5:3 2016 (51% acceptance rate.)
- Baldwin, D., H. Walker, and P. Henderson. "The Roles of Mathematics in Computer Science," *ACM Inroads*, Dec. 2013.
- Baldwin, D., *et al.*, "Case Studies of Liberal Arts Computer Science Programs." *ACM Transactions on Computing Education*, March 2010.
- Baldwin, D. "CONSUL: A Parallel Constraint Language." *IEEE Software*, July 1989 (6:4). pp. 62–69.

Refereed Conference Papers

- Teresco, J. D., A. Tartaro, A. Holland-Minkley, G. Braught, J. Barnard, and D. Baldwin. "CS Curricular Innovations with a Liberal Arts Philosophy," SIGCSE Technical Symposium on Computer Science Education, Mar. 2022.
- Baldwin, D. "Can We 'Flip' Non-Major Programming Courses Yet?" SIGCSE Technical Symposium on Computer Science Education, Mar. 2015. (36% acceptance rate.)
- Baldwin, D. "Surface Reconstruction from Constructive Solid Geometry for Interactive Visualization," Third International Symposium on Visual Computing (Springer: Lecture Notes in Computer Science 4841), Nov. 2007, pp. 321–330. (44% acceptance rate.)
- Baldwin, D. "Effectiveness of a Language Implementation Project in Building Appreciation for Formal Specification," Papers of the Twelfth Annual CCSC Northeastern Conference, Apr. 2007, pp. 173–183. (44% acceptance rate.)
- Baldwin, D. "A Compiler for Teaching about Compilers", Proceedings of the 34th SIGCSE Technical Symposium on Computer Science Education, Feb. 2003, pp. 220–223. (32% acceptance rate.)
- Henderson, P., D. Baldwin, *et al.*, "Striving for Mathematical Thinking". Working Group Report from the International Conference on Innovation and Technology in Computer Science Education, 2001 (*SIGCSE Bulletin*, Dec. 2001, pp. 114–124).
- Baldwin, D. "Three Years Experience with Gateway Labs". Proceedings of the SIGCSE/SIGCUE Conference on Integrating Technology into Computer Science Education, June 1996. pp. 6–7.
- Baldwin, D. "Discovery Learning in Computer Science". Proceedings of the 27th SIGCSE Technical Symposium on Computer Science Education, Feb. 1996. pp. 222–226. (38% acceptance rate.)
- Baldwin, D., G. Scragg, and J. Koomen. "A Three-Fold Introduction to Computer Science". Proceedings of the 25th SIGCSE Technical Symposium on Computer Science Education, Mar. 1994. pp. 290–294.
- Scragg, G., D. Baldwin, and J. Koomen. "Computer Science Needs an Insight-Based Curriculum". Proceedings of the 25th SIGCSE Technical Symposium on Computer Science Education, Mar. 1994. pp. 150–154.
- Cowley, B.*, G. Scragg, and D. Baldwin. "Gateway Laboratories: Integrated, Interactive Learning Modules". Proceedings of the 24th SIGCSE Technical Symposium on Computer Science Education, Feb. 1993. pp. 180–184.
- Baldwin, D. "A Foundations-Based Introduction to Computer Science at SUNY Geneseo". SUNY Conference on Instructional Technology, May 1992. pp. 1–4.

- Baldwin, D. and J. A. G. M. Koomen. "Using Scientific Experiments in Early Computer Science Laboratories". Proceedings of the 23rd ACM SIGCSE Technical Symposium on Computer Science Education, Mar. 1992. pp. 102–106.
- Baldwin, D. "Teaching Introductory Computer Science as the Science of Algorithms". Proceedings of the 21st SIGCSE Technical Symposium on Computer Science Education, Feb. 1990. pp. 58–62.
- Baldwin, D. "A Status Report on CONSUL". In Gelernter *et al.* (eds.) *Languages and Compilers for Parallel Computing*. MIT Press, Cambridge, MA, 1990. pp. 37–53.
- Baldwin, D. "Constraint Description and Extraction in RASP". In Darringer and Rammig (eds.) *Computer Hardware Description Languages and their Applications*. North-Holland, Amsterdam, 1990. pp. 71–84. (25% acceptance rate.)
- Baldwin, D. "Layered Design". Proceedings of the 1989 NSF Engineering Design Research Conference, Amherst, MA. June 1989. pp. 409–424.
- Baldwin, D. "Preliminary Estimates of Parallelism in CONSUL Programs". Proceedings of the 22nd Hawaii International Conference on System Sciences, Jan. 1989 (IEEE Computer Society Press). Vol. 2, pp. 780–788.
- Baldwin, D. "AI, Algorithms, and Hybrids for Electronic Design". Presentation, 2nd International Conference on Applications of Artificial Intelligence in Engineering, Aug. 1987.
- Baldwin, D. and C. Quiroz†. "Parallel Programming and the CONSUL Language". Proceedings of the 1987 International Conference on Parallel Processing, Aug. 1987 (Pennsylvania State University Press). pp. 389–392.

Unrefereed Papers

- Williams, L. and D. Baldwin. "Highlights of the ACM Student Research Competition," *Communications of the ACM*, Nov. 2017, pg. 5.
- Baldwin, D. "Is Computer Science a Relevant Academic Discipline for the 21st Century?" *Computer*, Dec. 2011, pp. 81–83 (invited contribution to "Education" column).
- Baldwin, D. and A. Brady. "Guest Editors' Introduction: Computer Science in the Liberal Arts," *ACM Transactions on Computing Education*, March 2010.
- Marion, B. and D. Baldwin. "SIGCSE Committee Report on the Implementation of a Discrete Mathematics Course," *SIGCSE Inroads*, June 2007 (39:2), pp. 109–126.
- Baldwin, D. "Architecture of the IViPP Particle Visualization Program." Technical report, June 2004. Available at <http://cs.geneseo.edu/~baldwin/ivipp/ivipparch.html>.
- Baldwin, D. and P. Henderson. "The Importance of Mathematics to the Software Practitioner." *IEEE Software*, Mar/Apr. 2002, pp. 112, 110, 111 (invited contribution to "Loyal Opposition" column).
- Baldwin, D. "Some Thoughts on Undergraduate Teaching and the Ph. D." *SIGCSE Bulletin*, Dec. 2000 (32:4). pp. 60–62.
- Baldwin, D. "Finding a Place for Computer-Equipped Lectures in a Lab-Rich Environment". *SIGCSE Bulletin*, Dec. 1997 (29:4). pp. 34–37.
- Baldwin, D. and H. Hitchings*. "Constraint Sensitive Scheduling in RASP". *SIGDA Newsletter*, Oct. 1991 (21:2). pp. 50–59.
- Baldwin, D. and G. Scragg. "Integrating Foundations of Computer Science into the Introductory Curriculum". Departmental Report number 2, Dept. of Computer Science, SUNY Geneseo. July 1991.
- Scragg, G. and D. Baldwin. "An Insight-Based Computer Science Curriculum". Departmental Report number 1, Dept. of Computer Science, SUNY Geneseo. June 1990.

INVITED PRESENTATIONS, REVIEWS, AND MISCELLANEOUS:

- "Should Math Students Take a Computer Graphics Course?" Colloquium presentation, SUNY Geneseo Department of Mathematics, Feb. 16, 2023.

- “Liberal Arts Computing Curricula: Innovations, Challenges, and Opportunities.” Pre-symposium workshop (substitute workshop leader w/ A. Holland-Minkley), SIGCSE Technical Symposium on Computer Science Education, Mar. 2020.
- “Making an OER Calculus Text Our Own.” Conference presentation (D. Baldwin, C. Leary, G. Reuter, and G. Towsley), MAA Seaway Section, Nov. 2019.
- “Draft Report of the SIGCSE Committee on Computing Education in the Liberal Arts.” Session organizer, 49th SIGCSE Technical Symposium on Computer Science Education, February 2018.
- “Math for CS, CS for Math: Some Thoughts.” Panel presentation (panel title “Math for Computing? Computing for Math? A Discussion of Interdependencies”), MathFest, August 2018.
- “Computing Education in Liberal Arts Colleges: A Status Report of the SIGCSE Committee.” Session organizer, 48th SIGCSE Technical Symposium on Computer Science Education, March 2017.
- Session contributor (session title “CS1: Beyond Programming”), 48th SIGCSE Technical Symposium on Computer Science Education, March 2017.
- “Outcomes Assessment and the Public Trust: A Cure for No Known Disease?” Conference presentation (D. Baldwin and T. Greenfield), ACAD / PBK 6th biennial conference “Catching the Wave: Energy and Renewal in Liberal Arts Education,” June 2016.
- “pyMGeo: A Better Way to Generate MCNP Geometry for OMEGA.” Poster (E. Skiba*, D. Baldwin, and H. Tran*), Omega Laser Facility Users Group meeting, April 2012.
- “Interactive Visualizations in Particle Physics (IViPP).” Poster (H. Q. Tran*, E. Skiba*, and D. Baldwin), 53rd Annual Meeting of the APS Division of Plasma Physics, November 2011.
- “Discrete Structures and the Three-Fold Introduction to Computer Science.” Panel presentation (panel title “Teaching Mathematical Reasoning Across the Curriculum”), 43rd SIGCSE Technical Symposium on Computer Science Education, March 2012.
- “IViPP: Visualizations for Inertial Confinement Fusion.” Poster (D. Baldwin, E. Skiba* and H. Q. Tran*), Omega Laser Facility Users Group meeting, April 2011.
- “SIGCSE Special Project Showcase.” Session organizer and moderator, 42nd SIGCSE Technical Symposium on Computer Science Education, March 2011.
- “Some Developments in Mathematical Thinking for Computer Science Education Since Computing Curricula 2001.” Panel moderator, 41st SIGCSE Technical Symposium on Computer Science Education, March 2010.
- “Successful Undergraduate Research: Lessons from Experience.” Panel presentation (panel title “Mechanics of Undergraduate Research at Liberal Arts Colleges—Lessons Learned”), 38th SIGCSE Technical Symposium on Computer Science Education, March 2007.
- “Broadening Minds in the Programming Languages Course.” Panel presentation (panel title “Approaches to Teaching the Programming Languages Course: A Potpourri”), 11th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education, June 2006.
- “Final Oral Report of the SIGCSE Committee on the Implementation of a Discrete Mathematics Course.” Special session presenter, 37th SIGCSE Technical Symposium on Computer Science Education, Mar. 2006.
- Panel presentation (panel title “Considerations on Undergraduate Computer Science Research”), 10th Consortium for Computer Science in Colleges Northeastern Conference, Apr. 2005.
- “Status Report on the SIGCSE Committee on the Implementation of a Discrete Mathematics Course.” Special session presenter, 36th SIGCSE Technical Symposium on Computer Science Education, Feb. 2005.
- “The Architecture of the IViPP Particle Visualization Program.” Invited talk, University of Rochester Laboratory for Laser Energetics, Oct. 2004; Lawrence Livermore National Laboratory, July 2004.
- “Status Report on the SIGCSE Committee on the Implementation of a Discrete Mathematics Course.” Special session organizer, 35th SIGCSE Technical Symposium on Computer Science Education, Mar. 2004.

- “Objects Early at SUNY Geneseo.” Panel presentation (panel title “Transitioning to an Objects-Early Three-Course Introductory Sequence: Issues and Experiences”), 35th SIGCSE Technical Symposium on Computer Science Education, Mar. 2004.
- “Integrating Discrete Math into the CS Curriculum”. Panel presentation (panel title “How Departments are Responding to the Mathematics Recommendations in CC2001”), 34th SIGCSE Technical Symposium on Computer Science Education, Feb. 2003.
- “The ‘Science’ in Computer Science”. Panel presentation (panel title “Integrating Empirical Methods into Computer Science”), 33rd SIGCSE Technical Symposium on Computer Science Education, Feb. 2002.
- “Is There Too Much Math in the Computer Science Curriculum?” Panel presentation (panel title “Is There Too Much Math in the Computer Science Curriculum?”), 17th Eastern Small College Computing Conference, Oct. 2001.
- “Integrating Mathematical Reasoning into Introductory Computer Science Courses.” Workshop (w/ P. Henderson), 17th Eastern Small College Computing Conference, Oct. 2001.
- “How Mathematical Thinking Enhances Computer Science Problem Solving”. Panel moderator, 32nd SIGCSE Technical Symposium on Computer Science Education, Feb. 2001.
- “The Three-Fold Introduction to Computer Science — The Theory Fold”. Panel presentation (panel title “CS1 and 2: Foundations of Computer Science and Discrete Mathematics”), 31st SIGCSE Technical Symposium on Computer Science Education, Mar. 2000.
- “Laboratories in the Three-Fold Introduction to Computer Science”. Panel presentation (panel title “Now for the Laboratory Experience! The View from Four Different Computer Science Curricula”), Frontiers in Education Conference '98, Nov. 1998.
- “Interdisciplinary General Education”. Workshop (w/ T. Greenfield), NSF Regional Conference “Educational Reform: Issues and Obstacles for the 21st Century”, Northeastern University, April 1998.
- “Mathematics in the Three-Fold Introduction to Computer Science”. Panel presentation (panel title “Integration of Mathematical Topics in CS1 and CS2”), 29th SIGCSE Technical Symposium on Computer Science Education, Feb. 1998.
- “The Three-Fold Introduction to Computer Science”. Panel presentation (panel title “Four Innovations in Computer Science Curricula”), Frontiers in Education Conference '97, Nov. 1997.
- “Gateway Labs: Bridging the Gap from Passive Learning to Active Learning”. Panel presentation (panel title “Building Multimedia Courseware”), 12th Eastern Small College Computing Conference, Oct. 1996.
- “An Integrated Approach to Formal Methods in CS1 and 2”. Workshop on Exploring Formal Methods in the Computer Science Curriculum, Stevens Institute of Technology, July 1996.
- “Interactive Learning with Gateway Labs”. Demonstration (w/ M. Johansen* and J. Kapusta*), SIGCSE/SIGCUE Conference on Integrating Technology into Computer Science Education, June 1996.
- “Visions of Breadth in Introductory Computing Curricula”. Panel moderator, 26th SIGCSE Technical Symposium on Computer Science Education, Mar. 1995.
- “Teaching to Diverse Learning Styles”. Panel presentation (panel title “Alternative Teaching Strategies in CS1: Supporting Diversity”), 26th SIGCSE Technical Symposium on Computer Science Education, Mar. 1995.
- “Designing Laboratory Exercises that Use the Scientific Method”. Workshop (w/ J. Koomen), 25th SIGCSE Technical Symposium on Computer Science Education, Mar. 1994.
- “Designing Laboratory Exercises for CS1 and 2”. Workshop (w/ J. Koomen), 24th SIGCSE Technical Symposium on Computer Science Education, Feb. 1993.