

Lauren E. Margulieux
Assistant Professor of Learning Technologies

lmargulieux@gsu.edu
404.413.8064
laurenmarg.com

Department of Learning Sciences
Georgia State University
Atlanta, GA 30302-3978

EDUCATION

Ph.D. in Engineering Psychology, Minor in Education, 2016
Georgia Institute of Technology
Committee: Richard Catrambone (chair), Francis Durso, Mark Guzdial, Wendy Rogers, and Wendy Newstetter
Dissertation: *Using Subgoal Learning and Self-Explanation to Improve Programming Education*

M.S. in Engineering Psychology, 2014
Georgia Institute of Technology
Committee: Richard Catrambone (chair), Francis Durso, and Mark Guzdial
Thesis: *Subgoal Labeled Instructional Text and Worked Examples in STEM Education*

B.A. in Psychology, 2010
Southwestern University
Summa Cum Laude

Texas A&M University, August 2007 – May 2008

PROFESSIONAL EXPERIENCE

Assistant Professor of Learning Technologies, Georgia State University	2016-present
Postdoctoral Scholar, Center for Teaching and Learning, Georgia Tech	2016
Graduate Teaching Assistant (Instructor of Record), Georgia Tech	2015-2016
Graduate Research Assistant, Center for 21 st Century Universities, Georgia Tech	2011-2015
Human Factors Intern, Human Interfaces Inc.	2010-2011
Peer Academic Mentor, Southwestern University	2009-2010

Awards and Honors

Winner of the Emerald/HETL Education Outstanding Doctoral Research Award: \$1500, 2017

Selected for Early Career Workshop at CSCL 2017, International Society for the Learning Sciences: \$1000, 2017

Young Scientist Travel Award, Indiana University CogSci Program and NSF: \$1000, 2016

Outstanding Graduate Student, School of Psychology, Georgia Tech: \$500, 2016

Chair's Award for Best Paper at ICER Conference, 2015

- *Subgoals, Context, and Worked Examples in Learning Computing Problem Solving*

Outstanding Graduate Student Instructor Finalist, Georgia Tech, 2015

- Course: Research Methods for Human Subjects Research

Foley Scholar Finalist, Georgia Tech, 2015

Presidential Scholarship, Georgia Tech: \$2750 per semester, 2011-2015

Outstanding Psychology Student, Southwestern University, Spring 2010

Psi Chi Regional Research Award: \$300, Spring 2010

- *Shy to "Fly": Testing the Effectiveness of Self-presentation Strategies of Shy Individuals*

SCHOLARSHIP

Funding

Funded Projects

NSF:EHR - Improving Undergraduate STEM Education

- Title: *Developing and Assessing Subgoal Labels for Imperative Programming to Improve Student Learning Outcomes* (#1712231)
- Other personnel: Morrison, B. B. (PI), Decker, A. (Co-PI)
- Position: Co-Principal Investigator
- Project dates: August 2017 – July 2020
- Budget: \$299,927

APF COGDOP Graduate Research Scholarship

- Title: *Subgoal-Oriented Instructional Text and Worked Examples in STEM Education*
- Project dates: January 2013 – January 2014
- Budget: \$1000

Proposals Under Review

NSF:EHR– CAREER

- Title: *Constructing Prior Knowledge in Computing Education*
- Position: Principal Investigator
- Project details: Proposed, projected dates 03/19 – 02/24
- Budget: \$505,888

IES – STEM Education, Development and Innovation

- Title: *Increasing Access to Computing Education by Supporting Online Computing Courses (IACE)*
- Other personnel: Calandra, B. (Co-PI) and Morrison, B. B. (Co-PI)
- Position: Principal Investigator
- Project details: Proposed, projected dates 08/19 – 07/23
- Budget: \$1,384,583

Publications

Referred Journal Articles

Numbering system: J# = Journal article

Italics indicate student author

- [J6] **Margulieux, L. E.**, & Catrambone, R. (2018, online). Finding the best types of guidance for constructing self-explanations of subgoals in programming. *Journal of the Learning Sciences*. Published online 06/26/18. doi: 10.1080/10508406.2018.1491852
- [J5] **Margulieux, L. E.**, Catrambone, R., & *Schaeffer, L. M.* (2018, online). Varying effects of subgoal labeled expository text in programming, chemistry, and statistics. *Instructional Science*. Published online 02/14/18. doi: 10.1007/s11251-018-9451-7
- [J4] **Margulieux, L. E.**, McCracken, W. M., & Catrambone, R. (2016). Mixing face-to-face and online learning: Instructional methods that affect learning. *Educational Research Review*, 19, 104-118. doi: 10.1016/j.edurev.2016.07.001
- [J3] **Margulieux, L. E.**, *Chen, D.*, *McDonald, J. D.*, Bujak, K. R., *Gable, T. M.*, *Darling, C. M.*, *Schaeffer, L. M.*, & *Barg-Walkow, L. H.* (2016). Online collaboration applications evaluated by ease of use. *Ergonomics in Design*, 24(2), 21-30. doi: 10.1177/1064804615611273
- [J2] **Margulieux, L. E.**, & Catrambone, R. (2016). Improving problem solving with subgoal labels in expository text and worked examples. *Learning and Instruction*, 42, 58-71. doi: 10.1016/j.learninstruc.2015.12.002
- [J1] **Margulieux, L. E.**, Catrambone, R., & Guzdial, M. (2016). Employing subgoals in computer programming education. *Computer Science Education*, 26(1), 44-67. doi: 10.1080/08993408.2016.1144429

Competitive Conference Proceedings

P# = Conference proceedings

- [P13] *Parker, M. C.*, *Solomon, A.*, *Pritchett, B.*, *Illingworth, D.*, **Margulieux, L. E.**, & Guzdial, M. (2018). Socioeconomic status and computer science achievement: Spatial ability as a mediating variable in a novel model of understanding. In *Proceeding of the Fourteenth Annual Conference on International Computing Education Research* (pp. 97-105). New York, NY: ACM. doi: 10.1145/3230977.3230987
- [P12] **Margulieux, L. E.**, & Catrambone, R. (2017). Using learners' self-explanations to guide initial problem solving. In *Proceeding of the Thirteenth Annual Conference on International Computing Education Research* (pp. 21-29). New York, NY: ACM. doi: 10.1145/3105726.3106168
- [P11] *Morrison, B. B.*, *Decker, A.*, & **Margulieux, L. E.** (2016). Learning loops: A replication study illuminates impact of HS courses. In *Proceedings of the Twelfth Annual International Conference on International Computing Education Research* (pp. 221-230). New York, NY: ACM. doi: 10.1145/2960310.2960330
- [P10] **Margulieux, L. E.**, & Catrambone, R. (2016). Using subgoal learning and self-explanation to improve programming education. In A. Papafragou, D. Grodner, D. Mirman, & J.C.

Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 2009-2014). Austin, TX: Cognitive Science Society.

- [P9] **Schaeffer, L. M., Margulieux, L. E., & Catrambone, R.** (2016). Interaction of instructional materials order and subgoal labels on learning in programming. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 271-276). Austin, TX: Cognitive Science Society.
- [P8] **Margulieux, L. E., Morrison, B. B., Guzdial, M., & Catrambone, R.** (2016). Training learners to self-explain: Designing instructions and examples to improve problem solving. In *Proceedings of Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016*. International Society of the Learning Sciences [online].
- [P7] **Morrison, B. B., Margulieux, L. E., Ericson, B., & Guzdial, M.** (2016). Subgoals help students solve Parsons problems. In *Proceedings of ACM's SIG Computer Science Education* (pp. 42-47). New York, NY: ACM. doi: 10.1145/2839509.2844617
- *[P6] **Morrison, B. B., Margulieux, L. E., & Guzdial, M.** (2015). Subgoals, context, and worked examples in learning computing problem solving. *Proceedings of the Eleventh Annual International Conference on International Computing Education Research* (pp. 21-29). New York, NY: ACM. doi: 10.1145/2787622.2787733
- *Awarded Chairs' Best Paper Award
- [P5] **Margulieux, L. E., McCracken, W. M., & Catrambone, R.** (2015). Mixing in-class and online learning: Content meta-analysis of outcomes for hybrid, blended, and flipped courses. In O. Lindwall, P. Hakkinen, T. Koschmann, P. Tchounikine, & S. Ludvigsen (Eds.) *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference* (pp. 220-227), 2. Gothenburg, Sweden: The International Society of the Learning Sciences.
- [P4] **Margulieux, L. E. & Catrambone, R.,** (2014). Improving programming instruction with subgoal labeled instructional text. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.) *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 952-957). Austin, TX: Cognitive Science Society.
- [P3] **Margulieux, L. E. & Catrambone, R.** (2014). Improving problem solving performance in computer-based learning environments through subgoal labels. *Proceedings of the First ACM Conference on Learning @ Scale* (pp. 149-150). New York, NY: ACM. doi: 10.1145/2556325.2567853
- [P2] **Margulieux, L. E., Catrambone, R., & Guzdial, M.** (2013). Subgoal labeled worked examples improve K-12 teacher performance in computer programming training. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.) *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 978-983). Austin, TX: Cognitive Science Society.
- [P1] **Margulieux, L. E., Guzdial, M., & Catrambone, R.** (2012). Subgoal-labeled instructional material improves performance and transfer in learning to develop mobile applications. *Proceedings of the Ninth Annual International Conference on International Computing Education Research* (pp. 71-78). New York, NY: ACM. doi: 10.1145/2361276.2361291

Books and Chapters

C# = Book chapter

- [C7] **Margulieux, L. E.**, Dorn, B., & Searle, K. (in press, expected February 2019). Learning Sciences for Computing Education. In *Handbook of Computing Education Research*. S. Fincher & A. Robbins (Eds.). Cambridge University Press.
- [C6] Robins, A., **Margulieux, L. E.**, & Morrison, B. B. (in press). Cognitive Sciences for Computing Education. In *Handbook of Computing Education Research*. S. Fincher & A. Robbins (Eds.). Cambridge University Press.
- Madden, A., **Margulieux, L. E.**, Goel, A. K., & Kadel, R. S. (Eds.). (in press, expected March 2019). *Blended Learning in Practice: A Guide for Practitioners and Researchers*. Cambridge, MA: MIT Press.
- [C5] **Margulieux, L. E.** (in press). Blended learning in an upper-level, required course on research methodology. *Blended Learning in Practice: A Guide for Practitioners and Researchers*. A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.). Cambridge, MA: MIT Press.
- [C4] Kadel, R. S., & **Margulieux, L. E.** (in press). Research methods in blended learning. *Blended Learning in Practice: A Guide for Practitioners and Researchers*. A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.). Cambridge, MA: MIT Press.
- [C3] **Margulieux, L. E.**, & Kadel, R. S. (in press). Analyzing quantitative and qualitative data for blended learning. *Blended Learning in Practice: A Guide for Practitioners and Researchers*. A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.). Cambridge, MA: MIT Press.
- [C2] *Schaeffer, L. M.*, **Margulieux, L. E.**, *Chen, D.*, & Catrambone, R. (2016). Feedback via Educational Technology. In L. Lin & R. Atkinson (Eds.), *Educational Technologies: Challenges, Applications, and Learning Outcomes*. (Education in a Competitive and Globalizing World, pp. 59-72). New York, NY: Nova Science Publishers, Inc.
- [C1] Durso, F. T., **Margulieux, L. E.**, & Blickensderfer, E. L. (2014). Human Factors, Oxford Bibliographies Online: Psychology. doi:10.1093/obo/9780199828340-0159

Publications Under Review or In Prep

- Margulieux, L. E., Williams, K. Z., & Lawrence, G. D. (revise and resubmit). Teaching certificate redesign: Making a flexible preparing future faculty program. *To Improve the Academy*.
- Ayer, T., Calandra, B., Margulieux, L. E., & Cohen, J. (revise and resubmit). Learner characteristics effect on outcomes in a K-12 computational problem-solving context. *Journal of Research on Technology in Education*.
- Margulieux, L. E., & Morrison, B. B. (Guest Eds.). (under contract). *Special Issue on Advancing Theory about the Novice Programmer: Computer Science Education*.
- Margulieux, L. E., & Catrambone, R. (under review). Scaffolding initial problem solving with learners' own self explanations of subgoals. *The Internet and Higher Education*.

Kim, M. K., & Margulieux, L. E. (under review). Improved motivation, emotion, and learning in flipping classrooms. *Journal of Research on Technology in Education*.

Margulieux, L. E., Ayer, T., Decker, A. (under review). Review of measurements used in computing education research and suggestions for increasing standardization. *Computer Science Education*.

Morrison, B. B., Margulieux, L. E., & Decker, A. (in prep). The curious case of learning loops: When applying EdPsych principles to CS education (kind of) did not work. *Computer Science Education*.

Conference Proceedings (Non-Competitive or Unrefereed)

Decker, A., Schneider, J., & **Margulieux, L. E.** (2018). How engineering and computing students demonstrate critical thinking during required co-op work experiences. In *The 2018 Proceedings of Frontiers in Education*.

Ayer, T., **Margulieux, L. E.**, Calandra, B., & Cohen, J. (2018). The relationship between learner characteristics and computer science learning: Implications for instructional design. In *The 41st Annual AECT Proceedings*.

Cohen, J., **Margulieux, L. E.**, Renken, M., Smith, S., & Jones, W. M. (2018). Maker Mindset: Measuring the Effect of Making. In Kay, J. and Luckin, R. (Eds.) *Rethinking Learning in the Digital Age: Making the Learning Science Count, 13th International Conference of the Learning Sciences (ICLS) Volume 3* (pp. 1505-1506). London, UK: International Society of the Learning Sciences.

Margulieux, L. E. (2018). Effects of Subgoal Labeled Expository Text Differ across Programming, Statistics, and Chemistry. *Annual Meeting of the American Education Research Association*.

Ericson, B., **Margulieux, L. E.**, & Rick, J. (2017). Solving Parsons problems versus fixing and writing code. Proceedings of 17th Koli Calling International Conference on Computing Education Research (pp. 20-29). New York, NY: ACM. doi: 10.1145/3141880.3141895

Margulieux, L. E. (2017). Subgoal learning in online STEM instruction. In Smith, B. K., Borge, M., Mercier, E., and Lim, K. Y. (Eds.). *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017 Volume 1*. (pp. 932-933), Philadelphia, PA: International Society of the Learning Sciences.

Peek, M. E., Majerich, D. M., **Margulieux, L. E.**, Stephens, A. B., Braga, R. A., & Madden, A. (2015). Teaching college faculty to interconnect chemistry and biochemistry experiments via the “Threading Flavones” project. In *Proceedings of the Chemistry Education Research & Practice of the Gordon Research Conference*.

Margulieux, L. E. & Catrambone, R. (2015). Varying effects of subgoal labeled procedural instructions in STEM learning [Abstract]. *Proceedings of the 37th Annual Meeting of the Cognitive Science Society*, 2942.

Margulieux, L. E. & Catrambone, R. (2014). Subgoal labels in worked examples, but not general text, aid statistics learning [Abstract]. *Abstracts of the Psychonomic Society*, 19, 129.

- Margulieux, L. E., Bujak, K. R., McCracken, W. M., & Majerich, D.** (2014). Hybrid, blended, flipped, and inverted: Defining terms in a two-dimensional taxonomy [Online]. *Proceedings of the 12th Annual Conference of the Hawaii International Conference on Education* (pp. 2394-2402).
- Margulieux, L. E. & Catrambone, R.** (2013). Multidimensional scaling for comparing problem solving knowledge to an ideal [Abstract]. *Abstracts of the Psychonomic Society, 18*, 191.
- Margulieux, L. E., Catrambone, R., & Guzdial, M.** (2012). Subgoals improve performance in computer programming construction tasks [CD]. *Proceedings of the EARLI SIG 6&7 Conference* (pp. 60-62).
- Desmond, P. A., **Margulieux, L. E., English, A. B., Burbey, A. L., & Matthews, G.** (2010). Emotional intelligence and driver stress. In *Proceedings of the Human Factors and Ergonomics Society*.
- Bollich, K. L., Mathis, S. E., Laas, W. L., Giuliano, T. A., & Margulieux, L. E.** (2010). Perceived effectiveness of strategies for improving perceptions of shy individuals. In *Proceedings of the Association for Psychological Science*.
- Margulieux, L. E., Giuliano, T. A., Bollich, K. L., Mathis, S. E., & Laas, W. L.** (2010). Introverted but not shy: A new perspective on the measurement of introversion. In *Proceedings of the Southwestern Psychological Association*.
- Mathis, S. E., Laas, W. L., Bollich, K. L., Giuliano, T. A., & Margulieux, L. E.** (2010). Shy to “fly”: Testing the effectiveness of self-presentation strategies of shy individuals. In *Proceedings of the Southwestern Psychological Association*.

Presentations

Conference Presentations as Presenting Author

- Cohen, J., Margulieux, L. E., Renken, M., Smith, S., & Jones, W. M. (June, 2018). *Maker Mindset: Measuring the Effect of Making*. Poster presented at International Conference of the Learning Sciences. London, UK.
- Margulieux, L. E. (April, 2018). *Effects of Subgoal Labeled Expository Text Differ across STEM Domains*. Paper presented at the Annual Meeting of the American Education Research Association. New York, NY.
- Margulieux, L. E., & Catrambone, R. (August, 2017). *Using learners' self-explanations to guide initial problem solving*. Paper presented at the Thirteenth Annual International Conference on International Computing Education Research. Tacoma, WA.
- Margulieux, L. E., & Catrambone, R. (August, 2016). *Using subgoal learning and self-explanation to improve programming education*. Paper presented at the 38th Annual Conference of the Cognitive Science Society. Philadelphia, PA.
- Schaeffer, L. M., Margulieux, L. E., & Catrambone, R. (August, 2016). *Interaction of instructional materials order and subgoal labels on learning in programming*. Poster presented at the 38th Annual Conference of the Cognitive Science Society. Philadelphia, PA.

- Margulieux, L. E., Morrison, B. B., Guzdial, M., & Catrambone, R. (June, 2016). *Training learners to self-explain: Designing instructions and examples to improve problem solving*. Paper presented at the International Conference of the Learning Sciences. Singapore.
- Margulieux, L. E. & Catrambone, R. (July, 2015). *Varying effects of subgoal labeled procedural instructions in STEM learning*. Poster presented at the 37th Annual Meeting of the Cognitive Science Society. Pasadena, CA.
- Margulieux, L. E., McCracken, W. M., & Catrambone, R. (2015, June). *Mixing in-class and online learning: Content meta-analysis of outcomes for hybrid, blended, and flipped courses*. Paper presented at the 11th International Conference on Computer Supported Collaborative Learning. Gothenburg, Sweden.
- Margulieux, L. E. & Catrambone, R. (2014, November). *Subgoal labels in worked examples, but not general text, aid statistics learning*. Poster presented at the 55th Annual Meeting of the Psychonomic Society. Long Beach, California.
- Margulieux, L. E. & Catrambone, R. (2014, March). *Improving problem solving performance in computer-based learning environments through subgoal labels*. Poster presented at the 1st ACM Conference on Learning @ Scale. Atlanta, Georgia.
- Margulieux, L. E. & Catrambone, R. (2013, November). *Multidimensional scaling for comparing problem solving knowledge to an ideal*. Poster presented at the 54th Annual Meeting of the Psychonomic Society. Toronto, Canada.
- Margulieux, L. E., Catrambone, R., & Guzdial M. (2013, August). *Subgoal labeled worked examples improve K-12 teacher performance in computer programming training*. Paper presented at the 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.
- Margulieux, L. E., & Catrambone R. (2013, June). *Teaching subgoals to improve problem solving in engineering*. Poster presented the 2013 ASEE Annual Conference and Exposition. Atlanta, Georgia.
- Margulieux, L. E., Catrambone, R., & Guzdial, M. (2012, September). *Subgoals improve performance in computer programming construction tasks*. Poster presented at the meeting of European Association for Research on Learning and Instruction SIG Learning and Instruction with Computers. Bari, Italy.
- Margulieux, L. E., Giuliano, T. A., Bollich, K. L., Mathis, S. E., & Laas, W. L. (2010, April). *Introverted but not shy: A new perspective on the measurement of introversion*. Poster presented at the meeting of Southwestern Psychological Association. Dallas, TX.

Invited Talks

- Margulieux, L. E. (2018). Helping computer science students, especially online learners, become better problem solvers. Presentation at the GVVU Brown Bag Series, Georgia Institute of Technology, Atlanta, GA.
- Margulieux, L. E. (2017). *Mixing face-to-face and online learning: Instructional methods that affect learning*. Presentation to the College of Information Science and Technology, University of Nebraska Omaha, Omaha, NE.

Margulieux, L. E. (2014). *Mixing face-to-face and online learning: Instructional methods that affect learning*. Presentation at the C21U Seminar Series, Atlanta, GA.
<https://www.youtube.com/watch?v=fd0o96s3Utc>

Margulieux, L. E. (2013). Hybrid, blended, flipped, and inverted classrooms: What do they mean and why do they matter? Presentation at the GVU Brown Bag Series, Georgia Institute of Technology, Atlanta, GA. <http://gvu.gatech.edu/events/gvu-brown-bag-seminar-laura-barg-walkow-and-lauren-margulieux>

Margulieux, L. E., & Coso, A. (2012). *Research methodology for engineering education research*. Presentation to the ASEE-GT meeting, Georgia Institute of Technology, Atlanta, GA.

Margulieux, L. E. (2012). *Cognitive science theory and educational implications*. Presentation to the ASEE-GT meeting, Georgia Institute of Technology, Atlanta, GA.

TEACHING AND ADVISING

Teaching

Courses Taught

Introduction to the Learning Sciences, Georgia State

Doctoral Research Seminar, Georgia State

Computer Skills for the Information Age, Georgia State

Critique of Education Research, Georgia State

Instructional Design, Georgia State

Engineering Psychology, Georgia Tech

*Research Methods, Georgia Tech

*Nominated for Outstanding Graduate Student Instructor

Introduction to Psychology (co-instructor), Georgia Tech

Courses Developed

LT 8100 Introduction to the Learning Sciences

****LT 7500** Digital and Information Literacy

****LT 7501** Computational Thinking and Human-Computer Interaction

****LT 7502** Computer Science Instructional Methods

****LT 7503** Computer Science Concepts for Teachers

**Part of the Computer Science Teacher Post-Baccalaureate Endorsement

Textbook

Calandra, B. D., & **Margulieux, L. E.** (2017). *Digital Skills for the Knowledge Economy*.
Dubuque, IA: Kendall Hunt.

Advising

Doctoral Committees

* Committee Chair

Completed

Aysegul Gok, Learning Technologies, Dissertation passed July 2018

Examining game-like design elements and student engagement in an online asynchronous course for undergraduate university students

***Julian Allen**, Learning Technologies, Dissertation passed April 2018

Faculty approaches to active learning: Barriers, affordances, and adoption

Merrin Oliver, Educational Psychology, Dissertation passed April 2017

Investigating individual differences in the conceptual change of biology misconceptions using computer-based explanation activities

In Progress

Ryan Cheek, Learning Technologies, Prospectus passed December 2017

An examination of pre-major health student's readiness for interprofessional education at a technical college

Solomon Betanga, Mathematics Education, Prospectus passed July 2018

Effects of modeling-based instruction with interactive simulations on college algebra students' achievement and attitude towards rational functions

Kimbeni Mansion, Mathematics Education

Aaron Rafter, Learning Technologies

Eric Sembrat, Learning Technologies

Bronne Dytoc, Learning Technologies

Charles Hampton, Learning Technologies

Julia Huprich, Learning Technologies

Mentoring

Doctoral Advisor , 3 current students, 1 doctoral graduate	2016 – present
Undergrad Research Assistant Manager , PSET Lab, Georgia Tech	2012 – 2016
Undergraduate Senior Thesis Advisor , Georgia Tech	2013 – 2014
Grand Challenges Group Facilitator , Georgia Tech	2013 – 2014
Peer Academic Mentor , Content Writer, Southwestern University	2009 – 2010

SERVICE

State, National, and Professional Community

Panelist, Future Workforce Conference hosted by honorCode	2018
Program Committee and Session Chair, ICER Conference	2018
Member, CS Advisory Council, Georgia Department of Education	2018
Contributor, CSforAll Atlanta School District Workshop for developing district-level plans for computer science education	2018
Member, K-8 computing standards development team organized by Georgia Department of Education	2018
Advisory Board Member, <i>Acquainting Metro Atlanta Youth with STEM</i>	2017 – 2018

National Science Foundation, Innovative Technology Experiences for Students and Teachers (ITEST) program
PI: Brendan Calandra, Budget: \$537,514

Contributor (for Georgia), Code.org planning meeting for developing state plans for computer science education 2017

Contributor, Finding a Home for Computing in Schools of Education 2017
National invitation-only meeting sponsored by CSforAll to strategize the creation of teacher development programs in colleges of education

Reviewer

NSF Review Panel (March 2018)
Computers & Education (Journal)
Computer Science Education (Journal)
Transactions on Computing Education (Journal)
International Conference of the Learning Sciences (ICLS, Conference)
ACM SIG Computer Human Interaction (CHI, Conference)

Department, College, and University

Ph.D. Coordinator, Instructional Design and Technology Ph.D. program 2018-present

Tech Fee Committee, Review proposals for distributing tech fee funds 2018

Proposal Writer, Next Gen. Faculty Initiative, Learning Sciences Center 2016, 2017
Co-authors: Brendan Calandra (principal), Maggie Renken

Professional Memberships

American Educational Research Association, Division C – Learning and Instruction

Association for Computing Machinery, SIG Computer Science Education

Cognitive Science Society

International Society of the Learning Sciences

INDUSTRY EXPERIENCE

Human Interfaces, Inc., Austin, Texas, Intern August 2010 – July 2011

- Tested software and hardware using Human Factors methodologies
- Analyzed results by coding subjective data and using SPSS for objective data
- Wrote and peer reviewed reports about methodology and results to deliver to clients

Austin Tech Insights, Austin, Texas, Intern February 2011 – July 2011

- Organized weekly meetings to discuss development of new business, Austin Tech Insights
- Developed registration questionnaire for new members of the research database
- Designed website with interdisciplinary team <http://www.austintechinsights.com/home.shtml>

VISIBILITY AND MEDIA COVERAGE

Personal website: laurenmarg.com, includes pages for Research and Papers, Teaching, and Blog

Publication Reference	Coverage
J6	Promoted June 2018 on Journal of the Learning Sciences' social media accounts, @JLearnSciences (Twitter) and @JrnlLearningSciences (Facebook).
J5	Guzdial, M. (2018, March). How CS differs from other STEM disciplines: Varying effects of subgoal labeled expository text in programming, chemistry, and statistics. <i>Computing Education Blog</i> . https://computinged.wordpress.com/2018/03/16/how-cs-differs-from-other-stem-disciplines-varying-effects-of-subgoal-labeled-expository-text-in-programming-chemistry-and-statistics/
J2 & J5	Rouhi, A. M. (2018, March). Easy as 1, 2, 3! Really?: Studies point to smarter way to learn procedures, solve problems. Georgia Tech College of Sciences. https://www.cos.gatech.edu/hg/item/603373 . Featured in <i>Science Bulletin</i> , phys.org.
The Case for Laptops in the Classroom	McKnight, C. (2018, February). OPINION: All zero-tech policies are absurd. <i>Technician</i> . http://www.technicianonline.com/opinion/article_0cb13a70-0ba7-11e8-a657-6f8582b87067.html In reference to http://c21u.gatech.edu/blog/case-laptops-classroom
Dissertation	Miller, C. (2017, November). Margulieux Examines How Students Use Subgoals, Feedback To Improve Programming Knowledge, Skills. <i>Research & Innovation: Research in GSU's CEHD</i> . https://news.gsu.edu/2017/11/13/margulieux-examines-students-use-subgoals-feedback-improve-programming-knowledge-skills/
Ericson et al., 2017	Guzdial, M. (2017, November). Parsons Problems have same Learning Gains as Writing or Fixing code, in less time: Koli Calling 2017 Preview. <i>Computing Education Blog</i> . https://computinged.wordpress.com/2017/11/17/parsons-problems-have-same-learning-gains-as-writing-or-fixing-code-in-less-time-koli-calling-2017-preview/
NSF IUSE	MAGIC Center (2017, August). Professor awarded an NSF grant: Looking for better ways to teach introductory computing. https://magic.rit.edu/?p=2490#more-2490
NSF IUSE	Rucker, A. (2017, August). NSF Awards IS&T Research Grant to Improve Computer Science Education. www.unomaha.edu/college-of-information-science-and-technology/news/2017/08/
Dissertation	Rouhi, A. M. (2017, June). Lauren Margulieux is recognized for best Ph.D. research. Georgia Tech College of Sciences. https://www.cos.gatech.edu/hg/item/592492
Dissertation	Parkinson, S. (2017, May). 2016 Emerald/HETL Education Outstanding Doctoral Research Award. http://www.emeraldgroupublishing.com/research/awards/hetl.htm
P11	Guzdial, M. (2016, September). Learning curves, given vs. generated subgoal labels, replicating a US study in India, and frames vs. text: More ICER 2016

trip reports. *Computing Education Blog*.
<https://computinged.wordpress.com/2016/09/16/learning-curves-given-vs-generated-replicating-from-us-to-india-and-frames-vs-text-more-icer-2016-trip-reports/>

P11 Guzdial, M. (2016, September). Preview ICER 2016: Ebooks design-based research and replications in assessment and cognitive load studies. *Computing Education Blog*. <https://computinged.wordpress.com/2016/09/02/preview-icer-2016-ebooks-design-based-research-and-replications-in-assessment-and-cognitive-load-studies/>

J3 IANS (2016, May). Download these free web apps to multi-task better. Featured in *Yahoo!News, The Times of India, The Economic Times, The Statesman, Business Standard, Zee News, The Free Press Journal, Three Novices, Udaipur Kiran, Download Jozz, Vishva Times, LA Indian, Seattle Indian, Can India*.

J3 Calishain, T. (2016, May). Thursday buzz: May 26, 2016. *Research Buzz*. <https://researchbuzz.me/2016/05/26/congress-gov-satellite-imagery-texas-floods-more-thursday-buzz-may-26-2016/> and <https://rbfirehose.com/2016/05/25/research-the-usability-of-online-collaborative-apps/>

J3 Smith, L. (2016, May). Which free web apps for collaboration are the most user-friendly?. Featured in *EurekAlert.org, Newswise.com, Phys.org, Livenetworknews.com, Scienmag.com, Allmagnews.com, Healthmedicinet.com, Science Codex*.

J3 Preston, J. (2016, May). Georgia Tech research finds that web apps for the workplace succeed to varying degrees. *GVU Center News Brief*. <http://gvu.gatech.edu/georgia-tech-researchers-find-web-apps-workplace-are-succeeding-varying-degrees>

Dissertation Guzdial, M. (2016, May). Mark Guzdial CS classes have different results than laboratory experiments—not in a good way. *Communications of the ACM*. <http://cacm.acm.org/magazines/2016/6/202660-the-solution-to-ai-what-real-researchers-do-and-expectations-for-cs-classrooms/fulltext>

J1 Routledge (2016, April). Employing subgoals in computer programming education. Featured in #ReadMyResearch: Education. <http://explore.tandfonline.com/page/bes/rmr/education>

Dissertation Guzdial, M. (2016, March). CS Classes Have Different Results than Laboratory Experiments—Not in a Good Way. *Blog @ CACM*. <http://bit.ly/1UUrOUu>

Dissertation Guzdial, M. (2016, March). Optimizing learning with subgoal labeling: Lauren Margulieux defends her dissertation. *Computing Education Blog*. <https://computinged.wordpress.com/2016/03/29/optimizing-learning-with-subgoal-labeling-lauren-margulieux-defends-her-dissertation/>

P7	Guzdial, M. (2016, February). SIGCSE 2016 Preview: Parsons problems and subgoal labeling, and improving female pass rates on the AP CS exam. <i>Computing Education Blog</i> . https://computinged.wordpress.com/2016/02/29/sigcse-2016-preview-parsons-problems-and-subgoal-labeling-and-improving-female-pass-rates-on-the-ap-cs-exam/
P6	Falkner, N. (2016, January). Teaching for (current) humans. Blog post. https://nickfalkner.com/2016/01/13/teaching-for-current-humans/
P6	Guzdial, M. (2015, August). ICER 2015 preview: Subgoal labeling works for text, too. <i>Computing Education Blog</i> . https://computinged.wordpress.com/2015/08/07/icer-2015-preview-subgoal-labeling-works-for-text-too/
P5	Georgia Tech GVU Center (2015, June). Defining mixed online learning. <i>News Brief</i> . http://us2.campaign-archive2.com/?u=a29f4ab2c992525ddd2413264&id=ecc826d67e&e=3f1206e0a9
P1	Bolkan, J. (2015, February). MIT researchers: Crowdsourced outlines improve learning from videos. <i>Campus Technology</i> and <i>THE Journal</i> . http://campustechnology.com/articles/2015/02/12/research-outlines-improve-learning-from-videos.aspx?admgarea=news
P1	Hardesty, L. (2015, February). Better how-to videos. System recruits learners to annotate videos, increasing their educational value. <i>MIT News Office</i> . http://newsoffice.mit.edu/2015/better-how-to-videos-0211
~	Wikipedia (2014). Subgoal labeling. http://en.wikipedia.org/wiki/Subgoal_labeling
P1	Georgia Tech GVU Center (2013). New computing education model applied to mobile app development. 2013 Annual Report: Advancing Technology to New Heights. http://gvu.gatech.edu/sites/gvu.gatech.edu/files/uploads/GVU%20AR%202013%20-%20web%20small.pdf
P3 & P4	American Psychological Foundation (2013, March). 15 students conduct groundbreaking research, thanks to APF scholarships. <i>Monitor on Psychology</i> , 44(3), 76.
P1	Guzdial, M. (2012, December). The bigger issues in learning to code: Culture and pedagogy. <i>Computing Education Blog</i> . http://computinged.wordpress.com/2012/12/21/the-bigger-issues-in-learning-to-code-culture-and-pedagogy/
P1	Pickens, C. (2012, October). Subgoals in learning. <i>Computing Education: A Research Blog about Computer Science Education</i> . http://michigancomputes.wordpress.com/2012/10/23/subgoals-in-learning/
P1	Guzdial, M. (2012, June). Instructional design principles improve learning about computing: Making measurable progress. <i>Computing Education Blog</i> .

<http://computinged.wordpress.com/2012/06/05/instructional-design-principles-improve-learning-about-computing-making-measurable-progress/>
