

Lauren E. Margulieux

Assistant Professor of Learning Technologies

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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), F. Durso, M. Guzdial, W. Rogers, and W. 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), F. Durso, and M. 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	2015-16
Graduate Research Assistant, Center for 21 st Century Universities, Georgia Tech	2011-15
Human Factors Intern, Human Interfaces Inc.	2010-11
Peer Academic Mentor, Southwestern University	2009-10

Awards and Honors

SIGCSE Technical Symposium Travel Grant Recipient: \$850, 2019

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 AND PROFESSIONAL DEVELOPMENT

Funding

External Grant Awards

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

Internal Grant Awards

Georgia State University, College of Ed. and Human Dev., Technology-Infusion Grants

- *Discipline-Inclusive Introduction to Computational Thinking Concepts and Activities*, collaborator: Caroline Sullivan, budget: \$500, Spring 2019
- *Algebra with Bootstrap for the Secondary Mathematics Methods Course*, collaborator: Pier Junor Clarke, budget: \$500, Spring 2019
- *Utilizing Pencil Code to Teach Computational Thinking for the Middle Childhood Science Methods Course*, collaborators: Natalie King and Patrick Enderle, budget: \$500, Spring 2019

Proposals Under Review

NSF:EHR - Improving Undergraduate STEM Education

- Title: *Collaborative Research: Computational Thinking for Teacher Education (CT4TE): Educating Future Elementary Teachers to be Computationally Literate*
- Other personnel: Yadav, A. (PI), Schwarz, C., Bouck, E., and Parks, A. (Co-PIs)
- Position: Co-Principal Investigator
- Project dates: August 2019 – August 2024
- Budget: \$1,988,795

Publications

Refereed Articles

Numbering system: J# = Journal article

Italics indicate student author

- [J8] *Ketenci, T. A., Calandra, B., Margulieux, L. E., & Cohen, J. (2019, online). Learner characteristics effect on outcomes in a K-12 computational problem-solving context. Journal of Research on Technology in Education. doi: 10.1080/15391523.2018.1553024*
- [J7] **Margulieux, L. E., Ketenci, T. A., Decker, A. (2019). Review of measurements used in computing education research and suggestions for increasing standardization. Computer Science Education, 29(1), 49-78. doi: 10.1080/08993408.2018.1562145**
- [J6] **Margulieux, L. E., & Catrambone, R. (2019). Finding the best types of guidance for constructing self-explanations of subgoals in programming. Journal of the Learning Sciences, 28(1), 108-151. doi: 10.1080/10508406.2018.1491852**
- [J5] **Margulieux, L. E., Catrambone, R., & Schaeffer, L. M. (2018). Varying effects of subgoal labeled expository text in programming, chemistry, and statistics. Instructional Science, 46(5), 707-722. 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**

Highly Competitive Conference Proceedings

P# = Conference proceeding

- [P14] **Margulieux, L. E., Morrison, B. B., & Decker, A. (2019). Design and pilot testing of subgoal labeled worked examples for five core concepts in CS1. In ITiCSE '19:**

Innovation and Technology in Computer Science Education Proceedings. New York, NY: ACM. doi: 10.1145/3304221.3319756

- [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. In *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. In *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. In *Proceedings of the Ninth Annual International Conference on International Computing Education Research* (pp. 71-78). New York, NY: ACM. doi: 10.1145/2361276.2361291

Edited Books

Madden, A., **Margulieux, L. E.**, Goel, A. K., & Kadel, R. S. (Eds.). (2019). *Blended Learning in Practice: A Guide for Practitioners and Researchers*. Cambridge, MA: MIT Press.

Book Chapters Published in Edited Books

C# = Book chapter

- [C7] **Margulieux, L. E.**, Dorn, B., & Searle, K. (2019). Learning Sciences for Computing Education. In S. Fincher & A. Robins (Eds.), *Handbook of Computing Education Research* (pp. 208-230). Cambridge, UK: Cambridge University Press.
- [C6] Robins, A., **Margulieux, L. E.**, & Morrison, B. B. (2019). Cognitive Sciences for Computing Education. In S. Fincher & A. Robins (Eds.), *Handbook of Computing Education Research* (pp. 231-275). Cambridge, UK: Cambridge University Press.
- [C5] **Margulieux, L. E.** (2019). Blended learning in an upper-level, required course on research methodology. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 269-288). Cambridge, MA: MIT Press.
- [C4] **Margulieux, L. E.**, & Kadel, R. S. (2019). Analyzing quantitative and qualitative data for blended learning. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 193-212). Cambridge, MA: MIT Press.
- [C3] Kadel, R. S., & **Margulieux, L. E.** (2019). Research methods in blended learning. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 129-154). 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

Refereed Conference Proceedings

Lewis, C., Guzdial, M., **Margulieux, L. E.**, Nelson, G., & Porter, L. (2019). Negotiating varied research goals in computing education research. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education* (pp. 500-501). New York, NY: ACM. doi: 10.1145/3287324.3287329

Morrison, B. B., Decker, A., & **Margulieux, L. E.** (2019). Using subgoal labeling in teaching CS1. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education* (pp. 1237). New York, NY: ACM. doi: 10.1145/3287324.3287540

Decker, A., Schneider, J., & **Margulieux, L. E.** (2018). How engineering and computing students demonstrate critical thinking during required co-op work experiences. In *Proceedings of the 2018 Frontiers in Education Conference*. doi: 10.1109/FIE.2018.8659164

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.

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.

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., 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).

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*.

Unrefereed Conference Proceedings

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

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

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).

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

Invited Talks

Margulieux, L. E., Kadel, R., & Goel, A. (2019). *Blended learning in practice*. Presentation to the Center for 21st Century Universities, Georgia Institute of Technology, Atlanta, GA.

Margulieux, L. E., & Goel, A. (2019). *Blended learning in practice*. Presentation to the Provost Teaching and Learning Fellows, Center for Teaching and Learning, Georgia Institute of Technology, Atlanta, GA.

Margulieux, L. E. (2019). *Mixing face-to-face and online learning: Instructional methods that affect learning*. Presentation to the Cognitive Science Seminar Series, Psychology Department, Georgia State University, Atlanta, GA.

Margulieux, L. E. (2018). Helping computer science students, especially online learners, become better problem solvers. Presentation at the GVU 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.

Conference Presentations as Presenting Author

- Margulieux, L. E.**, Morrison, B. B., & Decker, A. (2019). Design and pilot testing of subgoal labeled worked examples for five core concepts in CS1. Paper presented at Innovation and Technology in Computer Science Education (ITiCSE '19). Aberdeen, UK.
- Lewis, C., Guzdial, M., **Margulieux, L. E.**, Nelson, G., & Porter, L. (2019). *Negotiating varied research goals in computing education research*. Panel presented at SIGCSE Technical Symposium. Minneapolis, MN.
- Morrison, B. B., Decker, A., & **Margulieux, L. E.** (2019). *Using subgoal labeling in teaching CS1*. Workshop presented at SIGCSE Technical Symposium. Minneapolis, MN.
- 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.

TEACHING AND ADVISING

Teaching

Courses Taught

Theoretical and Cognitive Foundations of the Learning Sciences LT 8100, Georgia State
 Doctoral Research Seminar LT 9850, Georgia State
 Computer Skills for the Information Age LT 2010, Georgia State

Critique of Education Research LT 9900, Georgia State
Instructional Design LT 7100, Georgia State
Engineering Psychology PSY 2014, Georgia Tech
*Research Methods PSY 2015, Georgia Tech

*Nominated for Outstanding Graduate Student Instructor

Introduction to Psychology PSY 1011 (co-instructor), Georgia Tech

Courses Created

LT 8100 Theoretical and Cognitive Foundations of 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

Solomon Betanga, Mathematics Education, Dissertation passed November 2018

The effects of mathematical modeling instruction on precalculus students' performance and attitudes toward rational functions

Ryan Cheek, Learning Technologies, Dissertation passed October 2018

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

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

***Dorinda Paige**, Learning Technologies, Comprehensive exam passed December 2018

***Bryan Cox**, Learning Technologies, Comprehensive exam passed February 2019

***Reeny Madathany**, Learning Technologies, Completing coursework

Aaron Rafter, Learning Technologies, Prospectus stage

Eric Sembrat, Learning Technologies, Prospectus stage
Bronne Dytoc, Learning Technologies, Prospectus stage
Michael Maxwell, Learning Technologies, Comprehensive exam stage
Charles Hampton, Learning Technologies, Comprehensive exam passed October 2018
Julia Huprich, Learning Technologies, Comprehensive exam passed November 2018

Mentoring

Doctoral Advisor , 3 current students, 1 PhD graduate	2016 – present
Undergrad Research Assistant Manager , PSET Lab, Georgia Tech	2012-16
Undergraduate Senior Thesis Advisor , Georgia Tech	2013-14
Grand Challenges Group Facilitator , Georgia Tech	2013-14
Peer Academic Mentor , Content Writer, Southwestern University	2009-10

SERVICE

National and Professional Community

Guest Editor, Special Issue on Advancing Theory about the Novice Programmer, <i>Computer Science Education</i>	2018-19
Program Committee and Session Chair, ICER Conference	2018-19
Advisory Board Member, <i>Acquainting Metro Atlanta Youth with STEM</i> National Science Foundation, Innovative Technology Experiences for Students and Teachers (ITEST) program, PI: Brendan Calandra	2017-18
Invitation-only National Meetings	
CSforAll Knowledge Forum, sponsored by CSforAll	2018
Finding a Home for Computing in Schools of Education, sponsored by CSforAll	2017, 2018

Reviewer

NSF Review Panel (March 2018, February 2019)
Computers & Education (Journal)
Computer Science Education (Journal)
Transactions on Computing Education (Journal)
Journal of College Science Teaching (Journal)
International Conference of the Learning Sciences (Conference)
ACM Southeast (Conference)
ACM SIG Computer Human Interaction (Conference)

State and Local Community

Member, CS Advisory Council, Georgia Department of Education	2018-present
Contributor, Three-Year Strategic Planning Session organized by Georgia Department of Education and CS4GA	2019

Panelist, Future Workforce Conference hosted by honorCode	2018
Writer, Development team for K-8 Georgia Standards of Excellence for Computer Science organized by Georgia Department of Education	2018
Contributor, SCRIPT workshop for GA district-level computing education plans sponsored by CS4All	2018
Contributor, State-level Planning Meeting for computing education, sponsored by Code.org	2017

Department, College, and University

Program Coordinator, Computer Science Teacher Post-Bac Endorsement	2018-present
Program Coordinator, Instructional Design and Technology Ph.D.	2018-present
Chair, Tenure-Track Faculty Search Committee, Dept. of Learning Sciences	2019
Tech Fee Committee, Review proposals for distributing tech fee funds	2018, 2019
Proposal Writer, Next Gen. Faculty Initiative, Learning Sciences Center Co-authors: Brendan Calandra (principal), Maggie Renken	2016, 2017

Professional Memberships

American Educational Research Association, Division C – Learning and Instruction
 Association for Computing Machinery, SIG Computer Science Education
 International Society of the Learning Sciences

INDUSTRY EXPERIENCE

Human Interfaces, Inc. , Austin, Texas, Intern	August 2010 – July 2011
<ul style="list-style-type: none"> ▪ 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
<ul style="list-style-type: none"> ▪ 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

Publication Reference	Coverage
Blog	Wilson, G. (2019, February). Making it work in practice. <i>Third-bit.com</i> . http://third-bit.com/2019/02/25/making-it-work-in-practice.html

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