

# CURRICULUM VITAE

## Colleen M. Seifert

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12/1/20

### Education

Yale University, Ph.D. in Psychology, 1987  
Yale University, M.A. in Psychology, 1984; M. Phil. in Psychology, 1985  
Gustavus Adolphus College, B.A. in Psychology, Magna cum laude, 1980

### Professional Experience

Arthur F. Thurnau Professor, University of Michigan, Ann Arbor, 2011-  
Faculty Affiliate, Research Center for Group Dynamics, Institute for Social Research, 2009-  
Faculty Affiliate, Design Science Interdisciplinary Graduate Program, 2007-  
Professor, Department of Psychology, 2001-  
Adjunct Professor, School of Information, 1998-2009  
Associate Professor, Department of Psychology, 1994-2001  
Faculty Affiliate, Artificial Intelligence Laboratory, 1988-2000  
Visiting Professor, Psychology and Computer Science, Northwestern University, 1997  
Visiting Professor, Peking University, Beijing, China, October and November, 1994  
Assistant Professor, Department of Psychology, 1988-1994  
Postdoctoral Fellow, UCSD, and Navy Personnel Research & Development Center, 1987-1988  
Instructor, Departments of Computer Science and Psychology, Yale University, 1985-1987

### Honors and Awards

*Golden Apple Award* Nominee, campus-wide award organized by students to recognize exceptional teaching, 2020  
*Best Paper Award*, CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, 2020  
*Individual Award for Outstanding Contributions to Undergraduate Education*, College of Literature, Science, and the Arts, 2019  
*Top Downloaded Paper*, Journal of Engineering Education, 2018-2019  
*Provost's Teaching Innovation Prize*, University of Michigan, 2018  
*Best Paper Award*, American Society for Engineering Education (ASEE) – Design in Engineering Education Division, 2014  
*Best Paper Award*, Annual Conference of American Society of Engineering Education (ASEE) – Design in Engineering Education Division, Indianapolis, IN, 2014

*Outstanding Publication of the Year Award*, American Education Research Association (AERA) Division I (Education in the Professions), 2013

*Best Paper Award*, 15<sup>th</sup> International Conference on Engineering and Product Design Education, Dublin, 2013

*Arthur F. Thurnau Award for Undergraduate Education*, University of Michigan, 2011

*American Psychological Society Fellow* for “sustained, outstanding contributions to the science of psychology in the areas of research, teaching, service, and/or application,” 2010

*Best Design Cognition Paper Award*, Design Computing & Cognition, 4<sup>th</sup> International Conference, Stuttgart, 2010

*Elected Member* of the Governing Board of the Cognitive Science Society, 1994-2000

*University of Michigan Faculty Recognition Award*, 1997

*Elected Chair* of the Governing Board of the Cognitive Science Society, 1997

*Spencer Foundation Fellowship*, National Academy of Education, 1992

*Nominated Fellow* at the Center for Advanced Study in the Behavioral Sciences, Stanford, 1992

*Postdoctoral Teaching Fellow*, Center for Research in Learning and Teaching, 1990

*First Decade Award for Career Success*, Gustavus Adolphus College, 1990

*Office of Naval Technology & American Society for Engineering Education Fellowship*, 1987

*System Development Foundation Fellowship*, 1983; *Sloan Foundation Fellowship*, 1980

*National Science Foundation Graduate Fellowship*, Honorable Mention, 1982

*Patterson Award for the Outstanding Undergraduate in Psychology in the State of Minnesota*, 1980

## **Research Interests**

My research interests lie in complex human cognition, including memory, learning, problem solving, and creativity. My research centers on cross-disciplinary collaborations using a variety of field, qualitative, and experimental methods to identify impactful cognitive processes in creative problem solving. I hope to help people improve understandings of problems and potential solutions through the use of evidence-based cognitive strategies. Another longstanding area of interest is the management of misinformation in memory, and how access to experiential memories affects current and future learning, memory, and reasoning. Through these diverse research projects, I am invested in applying what we learn from Cognitive Science to improve learning and pedagogy, design and creative practices, and everyday life in arenas of public interest such as sustainability and interaction design.

## **Research Grants Awarded**

*Advancing Social Engagement for Problem and Solution Exploration within Engineering Education.*

National Science Foundation. Co-I with S. R. Daly (PI), S. Skerlos, J. W. Lee, K. Fu, & D. Tolbert.  
\$1,528,249, 8/2020-7/2025.

*Design for Life: Conceptual Representations in Human-centered Design and Technology.* University of Michigan “M-Cubed” Project. PI with S. R. Daly, S. Brueckner, & E. Adar (Co-Is), \$60,000, 11/30/2018 -12/31/2020.

*Navigating Scientific and Statistical Reasoning in Adolescence.* Institute of Education Sciences, U.S. Department of Education. Co-I with P. Shah (PI), R. Gonzalez & E. Adar, \$1,399,758, 7/1/2017-6/30/22.

*Behavioral Measures of Creative Thinking.* The Detroit Creativity Project. Co-I with P. Felsman (PI) & J. Himle, \$5,160, 7/31/2018 - 7/15/2019.

*Groundwater Game Collaboration.* Environmental Defense Fund (EDF). Co-PI with R. Goodspeed (PI), C. Babbitt & A. L. Garcia Briones, \$15,500, 9/1/2017-4/30/2019.

*Species-Specific Effects on Donation Behavior.* Environmental Defense Fund (EDF). Co-I with S. Preston (PI), \$11,500, 9/1/2017-12/31/2018.

*Research on Behavioral Interventions in Transportation Services.* Didi Chuxing, Inc. Co-PI with J. Zhang (PI) & S. Preston, \$150,000, 8/1/2017-8/1/2018.

*The Improv Project: Behavioral and Technology-Assisted Measures.* The Detroit Creativity Project. Co-I with P. Felsman (PI) & J. Himle (Co-I), \$5,160, 7/20/2017 - 7/31/2018.

*Tackling the 'right' problem: Investigating cognitive strategies used in understanding engineering problems.* National Science Foundation. Co-PI with S. R. Daly & S. Yilmaz (PIs), \$250,000, 9/17/2015-8/31/2020.

*Evidence-based Pedagogy in Engineering Education: Design Heuristics for Concept Generation.* National Science Foundation TUES II. Co-PI with S. R. Daly & S. Yilmaz (PIs), & R. Gonzalez (Co-PI), \$602,333, 09/15/2013- 08/31/2018.

*Strategies for Front-End Design.* University of Michigan "M-Cubed" Project. Co-PI with S. R. Daly & A. Huang-Saad, \$15,000, 10/23/2015 – 10/29/2017.

*The Improv Project: Process and Outcome Evaluations.* Detroit Creativity Project. Co-I with P. Felsman (PI) & J. Himle, \$8,120, 7/20/2015 - 7/31/2017.

*Investigating Conceptions of Natural Resources Across Domains and Populations.* Environmental Defense Fund and UM Graham Institute. Co-PI with S. Preston, \$73,339, 12/08/2014-3/31/2017.

*Addressing Individual and Group Biases with Data Visualization.* University of Michigan "M-Cubed" Project. Co-PI with P. Shah (co-PI) & E. Adar (PI). \$60,000, 11/2012-12/2014.

*Integrating Design Heuristics into Engineering Education as a Pedagogy for Ideation.* National Science Foundation. Co-PI with S. R. Daly & S. Yilmaz (PIs), & R. Gonzalez (Co-PI), \$199,859, 04/15/2012-09/14/13.

*Teaching Design Heuristics for Creative and Diverse Idea Generation.* University of Michigan Gilbert Whitaker Fund for the Improvement of Teaching, \$15,000, 6/1/2011- 12/31/2012. Co-PI with S. R. Daly (PI), R. Gonzalez & P. Papalambros (Co-PIs).

*Creative Process Pedagogy Across the Curriculum.* University of Michigan Office of the Vice President for Research, College of Engineering, College of Education, Department of Psychology, and the College of Literature, Sciences, and Arts. PI (with Co-PIs S. R. Daly, A. Huang-Saad, & C. Biewert), \$34,258, 8/2010-9/2011.

*The Role of Heuristics in Creative and Innovative Robust Designs: Understanding both individual and team-based design.* National Science Foundation, Engineering Design and Innovation (EDI), Grant 0927474. Co-PI (with R. Gonzalez & P. Papalambros), \$450,000, 7/2009-7/2012.

*Psychological Factors in Promoting Safety Belt Use among Part-Time Users.* University of Michigan Transportation Research Institute (UMTRI) and the National Highway Traffic Safety Administration (NHTSA). Co-PI (with C. Yoon & R. Gonzalez), \$57,840, 10/2008-7/2011.

*The Role of Heuristics in Creative and Innovative Robust Design.* Faculty Grants and Awards, Office of the Vice President for Research. Co-PI (with R. Gonzalez), \$14,202, 9/2008-9/2009.

*Examining Professional Competency.* NIH Small Research Grant Program (R03), to Southern Illinois University Medical School, Consultant, \$143,000, 1/2006 – 1/2008.

*Metacognition and Memory.* Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. PI, \$59,870, 1/2000 – 7/2000.

*Managing Disputed Information in Decision-Making.* Univ. of Michigan, Rackham Graduate School, Spring/Summer Research Partnership Grant. PI, \$4,000, 1997.

*Case-Based Training.* Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. PI, \$75,592, 1995-1996.

*Knowledge Transfer to New Domains.* Horace H. Rackham School of Graduate Studies, Faculty Grant. PI, \$15,000, 1993-1995.

*Case-Based Planning*. Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. PI, \$49,431, 1993-1994.

*Knowledge Transfer to New Domains*. Spencer Foundation, National Academy of Education. PI, \$35,000, 1992-1994.

*A Case-Based Approach to Planning*. Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. PI, \$75,192, 1991-1992.

*A Case-Based Approach to Decision-Making and Planning* (with K. Hammond, Univ. of Chicago). Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. Co-PI, \$59,769, 1990-1991.

*Case-Based Explanation and Decision Making* (with K. Hammond, Univ. of Chicago, Subcontract). Office of Naval Research, Cognitive Science Program, Initiative in Knowledge Acquisition and Learning. Associate Investigator, \$99,213, 1988-1990.

## Books

Goel, A.K., Seifert, C.M., & Freksa, C. (eds.) (2019). *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Montreal, QB: Cognitive Science Society. ISBN: 0-9911967-7-5  
<http://mindmodeling.org/cogsci2019>

Zlotoff, L. D., with Seifert, C. (2016). *The MacGyver secret: Connect to your inner MacGyver and solve anything*. Los Angeles, CA: MacGyver Solutions.

Batra, R., Seifert, C. M., & Brei, D. E. (eds.) (2015). *The psychology of design: Creating consumer appeal*. New York: Routledge.

Carter, K., & Seifert, C. M. (2012). *Learn psychology*. Burlington, MA: Jones & Bartlett Learning.

Polk, T. A., & Seifert, C. M. (eds.) (2002). *Cognitive modeling*. Cambridge, MA: The MIT Press. (Reviewed in *Contemporary Psychology*, *APA Review of Books*, 49(6), 672-674, 2004, and in *Applied Cognitive Psychology*, 18, 245-248, 2004.)

## Manuscripts Under Review

Subramonyam, H., Seifert, C., & Adar, E. (2020, November). Data Probes for Co-Creating the AI Design Material.

Subramonyam, H., Seifert, C., & Adar, E. (2020, November). ProtoAI: Model-Informed Prototyping for AI-Powered Applications.

Subramonyam, H., Im, J., Seifert, C., & Adar, E. (2020, November). "They Need to Learn my Language (a little bit):" Leaky abstractions for Co-Designing AI-Powered Applications.

Felsman, P., Himle, J. A., & Seifert, C. M. (2020). Reducing social anxiety and uncertainty intolerance in adolescents with improvisational theater.

## Journal Articles

Lee, J. W., Daly, S. R., Huang-Saad, A., & Seifert, C. M. (in press). Start with solutions or problems? Microfluidics design processes in academia and industry. *IEEE Access*.

Lee, J. W., Daly, S. R., Huang-Saad, A., Rodriguez, G., & Seifert, C. M. (in press). Cognitive strategies in solution mapping: How engineering designers identify problems for technological solutions. *Design Studies*.

Goodspeed, R., Babbitt, C., Briones, A. L. G., Pfleiderer, E., Lizundia, C., & Seifert, C. M. (2020). Learning to manage common resources: Stakeholders playing a serious game see increased interdependence in groundwater basin management. *Water*, 12, 1966. <https://doi.org/doi:10.3390/w12071966>

Leahy, K., Daly, S. R., McKilligan, S., & Seifert, C. M. (2020). Design fixation from initial examples: Provided versus self-generated ideas. *Journal of Mechanical Design*, 1-39.  
<https://doi.org/10.1115/1.4046446>

- Subramonyam, H., Seifert, C., Shah, P., & Adar, E. (2020). texSketch: Active diagramming through pen-and-ink annotations. CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (pp. 1–13). <https://doi.org/10.1145/3313831.3376155> **Best Paper Award.**
- Felsman, P., Gunawardena, S., & Seifert, C. M. (2020). Improv experience promotes divergent thinking, uncertainty tolerance, and affective well-being. *Thinking Skills and Creativity*, 35, 100632. <https://doi.org/10.1016/j.tsc.2020.100632>
- Deininger, M., Daly, S. R., Lee, J. C., Seifert, C. M., & Sienko, K. H. (2019). Prototyping for context: Exploring stakeholder feedback based on prototype type, stakeholder group and question type. *Research in Engineering Design*, 30(4), 453-471. <https://doi.org/10.1007/s00163-019-00317-5>
- Felsman, P., Seifert, C. M., & Himle, J. A. (2019). The use of improvisational theater training to reduce social anxiety in adolescents. *The Arts in Psychotherapy*, 63, 111-117. <https://doi.org/10.1016/j.aip.2018.12.001>
- Murray, J. K., Studer, J. A., Daly, S. R., McKilligan, S., & Seifert, C. M. (2019). Design by taking perspectives: How engineers explore problems. *Journal of Engineering Education*, 108, 248-275. DOI: 10.1002/jee.20263. **Top Downloaded Paper, Journal of Engineering Education, 2018-2019**
- Ostrowski, A., Daly, S. R., Huang-Saad, A., Seifert, C. M. (2019). Idea generation practices in a biomedical engineering capstone course. *IEEE Transactions on Education*, 1-8.
- Leahy, K., Daly, S. R., McKilligan, S., & Seifert, C. M. (2018). Supporting idea generation with design tools: Nesting *Design Heuristics* within Morphological Analysis. *Global Journal of Engineering Education*, 20(3), 159-170.
- Studer, J. A., Daly, S. R., McKilligan, S., & Seifert, C. M. (2018). Evidence of problem exploration in creative designs. *Artificial Intelligence for Engineering Design, Analysis, and Manufacturing, Special Issue on Design Creativity*, 32(4), 415-430. <https://doi.org/10.1017/S0890060418000124>
- Lee, J. W., Ostrowski, A., Daly, S. R., Huang-Saad, A., & Seifert, C. M. (2018). Idea generation in biomedical engineering courses using *Design Heuristics*. *European Journal of Engineering Education*, 44(3), 360-378. <https://doi.org/10.1080/03043797.2018.1514368>
- Leahy, K., Daly, S. R., Murray, J. K., McKilligan, S., & Seifert, C. M. (2018). Transforming early concepts with Design Heuristics. *International Journal of Technology and Design Education*. <https://doi.org/10.1007/s10798-018-9473-0>
- Lee, J. W., Daly, S. R., Huang-Saad, A., Seifert, C. M., & Lutz, J. (2018). Using design strategies from microfluidic device patents to support idea generation. *Microfluidics and Nanofluidics*, 22(70). <https://doi.org/10.1007/s10404-018-2089-6>
- Daly, S. R., McKilligan, S., Studer, J. A., Murray, J. A., & Seifert, C. M. (2018). Innovative solutions through innovated problems. *International Journal of Engineering Education*, 34(2B), 695-707.
- Seifert, C. M. (2017). The distributed influence of misinformation. *Journal of Applied Research in Memory and Cognition*, 6, 397-400.
- Gray, C. M., McKilligan, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2017). Using creative exhaustion to foster idea generation. *International Journal of Technology and Design Education*. <http://dx.doi.org/10.1007/s10798-017-9435-y>
- Seifert, C. M. (2017). The distributed influence of misinformation. *Journal of Applied Research in Memory and Cognition*, 6(4), 397-400.
- Daly, S. R., Mosyjowski, E., & Seifert, C. M. (2016). Teaching creative process across disciplines. *Journal of Creative Behavior*, doi:10.1002/jocb.158
- Yilmaz, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2016). Evidence-based design heuristics for idea generation. *Design Studies*, 46, 95-124. doi: <http://dx.doi.org/10.1016/j.destud.2016.05.001>

- Daly, S. R., Mosyjowski, E., Oprea, S. L., Huang-Saad, A., & Seifert, C. M. (2016). College students' views of creative process pedagogy. *Thinking Skills and Creativity*, 22, 1-13. <http://dx.doi.org/10.1016/j.tsc.2016.07.002>
- Daly, S. R., Seifert, C. M., Yilmaz, S., & Gonzalez, R. (2016). Comparing ideation techniques for beginning designers. *Journal of Mechanical Design*, 138(10), 101101-101108. doi:10.1115/1.4034087.
- Gray, C. M., Seifert, C. M., Yilmaz, S., Daly, S. R., & Gonzalez, R. (2016). What is the content of "Design Thinking"? Design Heuristics as conceptual repertoire. *International Journal of Engineering Education*, 32(3B), 1349-1355. [http://www.ijee.ie/latestissues/Vol32-3B/05\\_ijee3220ns.pdf](http://www.ijee.ie/latestissues/Vol32-3B/05_ijee3220ns.pdf)
- Yilmaz, S., Seifert, C. M., Daly, S. R., & Gonzalez, R. (2016). Design heuristics in innovative products. *Journal of Mechanical Design*, 138(7), 071102-071102-12. doi:10.1115/1.4032219
- Yilmaz, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2015). How do designers generate new ideas? Design heuristics across two disciplines. *Design Science*, 1, e4 (29 pages). doi:10.1017/dsj.2015.4.
- Kramer, J., Daly, S. R., Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2015). Investigating the impact of *Design Heuristics* on idea initiation and development. *Advances in Engineering Education*, 4(4) 1-26.
- Shafto, M. G., & Seifert, C. M. (2015). Teacher and learner: Supervised and unsupervised learning in communities of agents. Commentary on M. A. Kline, "How to learn about teaching: An evolutionary framework for the study of teaching behavior in humans and other animals." *Behavioral and Brain Sciences*, 38, e64.
- Daly, S. R., Mosyjowski, E., & Seifert, C. M. (2014). Teaching creativity in engineering courses. *Journal of Engineering Education*, 103(3), 417-449. DOI: 10.1002/jee.20048
- Kramer, J., Daly, S., Yilmaz, S., & Seifert, C. (2014). A case-study analysis of design heuristics in an upper-level cross-disciplinary design course. *Proceedings of the American Society for Engineering Education* (AC 2014-8452). Washington, DC: American Society for Engineering Education. **Awarded Best Paper in the Design Division.**
- Yilmaz, S., Daly, S. R., Christian, J. L., Seifert, C. M., & Gonzalez, R. (2013). Can experienced designers learn from new tools? A case study of idea generation in a professional engineering team. *International Journal of Design Creativity and Innovation*, 1(2), 82-96.
- Daly, S. R., Christian, J. L., Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2012). Design heuristics in engineering concept generation. *Journal of Engineering Education*, 101(4), 601-629. **Awarded Outstanding Publication of the Year for AERA Research in the Professions.**
- Lewandowski, S., Ecker, U. K., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest*, 13(3), 106-131.
- Daly, S. R., Christian, J. L., Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2012). Assessing *Design Heuristics* in idea generation within an introductory engineering design course. *International Journal of Engineering Education (IJEE)*, 28(2), 463-473.
- Seifert, C. M., Chapman, L. S., Hart, J. K., & Perez, P. (2012). Enhancing intrinsic motivation in health promotion and wellness. *American Journal of Health Promotion*, 26(3), TAHP1-TAHP10.
- Yilmaz, S., & Seifert, C. M. (2011). Creativity through design heuristics: A case study of expert product design. *Design Studies*, 32, 384-415. **Best Paper Award Runner Up for 2011.**
- Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2010). Cognitive heuristics in design: Instructional strategies to increase creativity in idea generation. *Artificial Intelligence for Engineering Design, Analysis, and Manufacturing, Special Issue on Design Pedagogy: Representations and Processes*, 24, 335-355.
- Seifert, C. M. (2008). Now why didn't I think of that? The cognitive processes that create the obvious. *Lewis & Clark Law Review*, 12(2): 489-507.
- Star, J. R., & Seifert, C. M. (2006). The development of flexibility in equation solving. *Contemporary*

- Educational Psychology*, 31(3), 280-300.
- Green, L., & Seifert, C. M. (2006). Translation of research into practice: Why we can't "Just do it." *Journal of the American Board of Family Practice*, 18(6), 541-545.
- Seifert, C. M. (2002). The continued influence of misinformation in memory: What makes a correction effective? In B. Ross (Ed.), *The psychology of learning and motivation*, Vol. 41 (pp. 265-292). San Diego: Academic Press.
- Seifert, C. M., & Patalano, A. L. (2001). Opportunism in memory: Preparing for chance encounters. *Current Directions in Psychological Science*, 10(6), 198-201.
- Seymour, T. L., Seifert, C. M., Shafto, M. G., & Mosmann, A. L. (2000). Using response time measures to assess "Guilty Knowledge." *Journal of Applied Psychology*, 85(1), 30-37.
- Johnson, H. M., & Seifert, C. M. (1998). Updating accounts following a correction of misinformation. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 24(6), 1483-1494.
- Greeno, J. G., Clancey, W. J., Lewis, C., Seidenberg, M., Derry, S., Gernsbacher, M. A., Langley, P., Shafto, M., Gentner, D., Lesgold, A., & Seifert, C. M. (1998). Commentary: Efforts to encourage multidisciplinary in the Cognitive Science Society. *Cognitive Science*, 22(1), 131-132.
- Patalano, A. L., & Seifert, C. M. (1997). Opportunistic planning: Being reminded of pending goals. *Cognitive Psychology*, 34, 1-36.
- Catrambone, R., Jones, C. M., Jonides, J., & Seifert, C. (1995). Reasoning about curvilinear motion: Using principles or analogy. *Memory and Cognition*, 23(3), 368-373.
- Johnson, H. M., & Seifert, C. M. (1994). Sources of the continued influence effect: When discredited information in memory affects later inferences. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20(6), 1420-1436.
- Seifert, C. M., Hammond, K. J., Johnson, H. M., Converse, T. M., MacDougall, T., & VanderStoep, S. W. (1994). Case-based learning: Predictive features in indexing. *Machine Learning*, 16, 37-56.
- VanderStoep, S. W., & Seifert, C. M. (1994). Learning 'how' vs. learning 'when': Improving problem solving transfer. *Journal of the Learning Sciences*, 3(1), 93-111.
- Patalano, A. L., & Seifert, C. M. (1994). Memory for impasses in problem solving. *Memory and Cognition*, 22(2), 234-242.
- Hammond, K. J., Converse, T. M., Marks, M., & Seifert, C. M. (1993). Opportunism and learning. *Machine Learning*, 10(3), 279-310.
- Seifert, C. M., & Shafto, M. G. (1993). Can there be a unified theory of cognition? *Journal of Mathematical Psychology*, 37(2), 311-323.
- Seifert, C. M., & Hutchins, E. L. (1992). Error as opportunity: Learning in a cooperative task. *Human-Computer Interaction*, 7(4), 409-435.
- Johnson, H. M., & Seifert, C. M. (1992). The role of predictive features in retrieving analogical cases. *Journal of Memory and Language*, 31, 648-667.
- Remington, R. W., Shafto, M. G., & Seifert, C. M. (1992). How human is SOAR? *Brain and Behavioral Sciences*, 15(3), 455.
- Hammond, K. J., Seifert, C. M., & Gray, K. C. (1991). Functionality in analogical transfer: A hard match is good to find. *Journal of the Learning Sciences*, 1(2), 111-152.
- Seifert, C. M. (1990). Content-based inferences in text. In A. Graesser & G. Bower (Eds.), *The psychology of learning and motivation*, Vol. 25 (pp. 103-122). San Diego: Academic Press.
- McKoon, G., Ratcliff, R., & Seifert, C. M. (1989). Making the connection: Generalized knowledge structures in story understanding. *Journal of Memory and Language*, 28, 711-734.

- Seifert, C. M., & Hutchins, E. L. (1989). Learning from error within a cooperative system. *Laboratory of Comparative Human Cognition Newsletter*, 11(4), 108-114.
- Seifert, C. M., & Norman, D. A. (1987). Levels of research. *Brain and Behavioral Sciences*, 10, 490-492.
- Seifert, C. M. (1986). The business of AI. *Imagination, Cognition, and Personality*, 6(2), 194-195.
- Seifert, C. M., Dyer, M. G., & Black, J. B. (1986). Thematic knowledge in story understanding. *TEXT*, 6(4), 393-426.
- Seifert, C. M., McKoon, G., Abelson, R. P., & Ratcliff, R. (1986). Memory connections between thematically similar episodes. *Journal of Experimental Psychology: Human Learning and Memory*, 12(2), 220-231.
- Seifert, C. M., Robertson, S. P., & Black, J. B. (1985). Types of inferences generated during reading. *Journal of Memory and Language*, 24, 405-422.

### Reviewed Conference Proceedings

- Murphy, L. R., & Daly, S. R., & Seifert, C. M., & Adar, E. A., & Brueckner, S. (2020, June), Considering people: An exploratory investigation of engineering student ideation. Proceedings of the 2020 ASEE Virtual Annual Conference, Virtual Online. Doi: 10.18260/1-2—34326.
- Chiu, T.-P., Kitayama, S., Yoon, C. & Seifert, C. (2019, November). Cultural differences in aesthetic preferences: Does product-to-context match matter?. In G. Muratovski and C. Vogel (Eds.), *Re:Research, Volume 5: Design Discourse on Culture and Society* (pp. 35- 45). Presented at the 2017 International Association of Societies of Design Research Conference.
- Creeger, S., McKilligan, S., & Seifert, C. (2019, Sept.). Exploring the problem space with Problem Exploration Strategies. In *Proceedings of the International Association of Societies of Design Research (IASDR) Conference*, Manchester, U.K.
- Felsman, P., Seifert, C. M., Gunawardena, S. (2019, July). Improv exercises promote uncertainty tolerance and improve creativity outcomes. In A. K. Goel, C. M. Seifert, & C. Freksa (eds.) *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 3455). Montreal, QB: Cognitive Science Society.
- Felsman, P., Seifert, C. M., & Himle, J. A. (2019, January). Adolescents engaged in improvisational theater have reduced social anxiety and increased confidence. Proceedings of the *23rd Annual Conference of the Society for Social Work and Research (SSWR)*, San Francisco, CA.
- Lee, J. W., Daly, S. R., Huang-Saad, A., & Seifert, C. M. (2019, June). Developing a design tool for solution mapping: Translating practitioners' strategies to support student engineers. *Proceedings of the American Society of Engineering Education Annual Conference*, Tampa, FL.
- Chun, E. Y., & Seifert, C. (2018). Creativity in design: Relationships among creativity components and comparison of idea generation outcomes between crowdsourcing and individual creativity. *Proceedings of the AIGA Design Educators Community Conferences*, Dialogue (Vol. 2), pp. 66-72. Ann Arbor, MI. <https://doi.org/10.3998/mpub.11689169>
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- Yilmaz, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2010). A comparison of cognitive heuristics use between engineers and industrial designers. In *Proceedings of the 4th International Conference on Design Computing and Cognition (DCC'10)* (pp. 3-22), Stuttgart, Germany. **Best Paper Award in Design Cognition.**
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## Book Chapters

- Daly, S. R., McKilligan, S., Leahy, K., & Seifert, C. M. (2019). Teaching design innovation skills: Design Heuristics support creating, developing, and combining ideas. In D. Schaefer, G. Coates, & C. Ekert (Eds.), *Design Education Today: Technical Contexts, Programs and Best Practices*. New York: Springer.
- Seifert, C. M., Gonzalez, R., Yilmaz, S., & Daly, S. R. (2015). Design Heuristics: A tool for innovation in consumer products. In R. Batra, C. M. Seifert, & D. Brei, (Eds.), *The psychology of design: Creating consumer desire* (Chapter 24). New York: Routledge.
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### Other Presentations and Publications

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- Liao, J. D., Seifert, C. M., & Preston, S. D. (2019, May). *Beauty in the Eye of the Activist: Narratives about Monarch Butterflies Affect Environmental Engagement*. Talk presented at the 31st APS Annual Convention, Washington, D.C.
- Romero-Canyas, R., Klotz, L., Seifert, C. M., & Preston, S. D. (2019, May). *Applied Sustainability: Psychology-Based Interventions to Engage Diverse Groups*. Contributed symposium at the 31st APS Annual Convention, May 23-26, 2019, in Washington, D.C., USA.
- Felsman, P., Gunawardena, S., & Seifert, C. M. (2019, July). *Improv Exercises Promote Uncertainty Tolerance and Improve Creativity Outcomes*. Poster presented at the 41st Annual Meeting of the Cognitive Science Society, Montreal, Canada.
- Felsman, P., Seifert, C. M., & Himle, J. A. (2019, January). *Adolescents engaged in improvisational theater have reduces social anxiety and increased confidence*. Proceedings of the 23rd Annual Conference of the Society for Social Work and Research (SSWR). San Francisco: Society for Social Work and Research (SSWR).
- Seifert, C. M. (2018, August). *Design as Inventive Problem Solving*. Advances in Cognitive Systems Conference, Palo Alto, CA.
- Seifert, C. M. (2018, July). *Too Good to be False: The Continued Influence of Misinformation after Correction*. Invited Symposium, 40th Annual Meeting of the Cognitive Science Society, Madison, WI. <https://cogsci.tv/category/cogsci2018/> (password: cogscitv)
- Seifert, C. M. (2018, July). *Behavioral Interventions in Transportation Science*. DiDi Research Symposium, University of Michigan, Ann Arbor, MI.

- Felsman, P., Gunawardena, S., & Seifert, C. M. (2018, May). *Improvisation boosts tolerance for uncertainty and divergent thinking*. Poster presented at the 30<sup>th</sup> Annual Convention of the Association for Psychological Science, San Francisco, CA.
- Seifert, C. M., & Zhang, J. (2018, March). *Psychology of Driver Transportation Decisions*. DiDi Research Symposium, University of Michigan, Ann Arbor, MI.
- Liao, J. D., Vickers, B. D., Seifert, C. M., & Preston, S. D. (2018, March). *Using awe appeals to increase pro-environmental responses and reduce polarization*. Poster presented at the meeting of the *Society for Personality and Social Psychology*, Atlanta, GA.
- Liao, J. D., Vickers, B. D., Seifert, C. M., & Preston, S. D. (2018, February). *Using earth concepts to effectively tailor pro-environmental advertisements*. Talk presented at the *Michigan University-wide Sustainability and Environment (MUSE) Conference*, Ann Arbor, MI.
- Liao, J. D., Vickers, B. D., Seifert, C. M., & Preston, S. D. (2017, February). *How do individual earth concepts predict pro-environmentalism?* Talk presented at the *Michigan University-wide Sustainability and Environment (MUSE) Conference*, Ann Arbor, MI.
- Liao, J. D., Vickers, B. D., Seifert, C. M., & Preston, S. D. (2017, January). *Thinking about the earth: Predicting pro-environmentalism from individual differences in earth concepts*. Poster presented at the meeting of the *Society for Personality and Social Psychology*, San Antonio, TX.
- Seifert, C. M., & Zhang, J. (2017, November). *Designing transportation decisions*. DiDi Research Symposium, University of Michigan, Ann Arbor, MI.
- Seifert, C. M., & Zhang, J. (2017, July). *The psychology of transportation ridership*. DiDi Research Symposium, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (2015). *The Cognitive Science of health promotion*. *AssetHealth Client Advisory Board*, Chicago, IL.
- Preston, S. D., Seifert, C. M., Vickers, B. D., & Liao, J. D. (2017, May) *Individual earth concepts vary and influence proenvironmental giving*. Presentation at the Environmental Defense Fund (EDF) meeting hosted by the Graham Sustainability Institute, University of Michigan, Ann Arbor, MI.
- Liao, J. D., Vickers, B. D., Seifert, C. M., Preston, S. D. (2017, March). *Individual earth concepts vary and influence proenvironmental giving*. Talk presented at the *MUSE Conference*, University of Michigan, Ann Arbor, MI.
- Felsman, P., Seifert, C. M., & Himle, J. (2017, January). *Improvisational theatre reduces social anxiety in adolescents*. Poster presented at the 21st Annual Conference of the *Society for Social Work and Research*, New Orleans, LA.
- Liao, J. D., Vickers, B. D., Seifert, C. M., & Preston, S. D. (2017, January). *Thinking about the earth: Predicting proenvironmentalism from individual differences in earth concepts*. Poster presented at the meeting of the *Society for Personality and Social Psychology*, San Antonio, TX.
- Liao, J. D., Vickers, B. D., Seifert, C. M., Preston, S. D. (2017, January). *Thinking about the earth: Predicting proenvironmentalism from individual differences in earth concepts*. Poster presented at the Sustainability Pre-Conference at the *Society for Personality and Social Psychology Convention*, San Antonio, TX.
- Yilmaz, S., Studer, J., Daly, S. R., & Seifert, C. M. (2016, April). *Characterizing cognitive heuristics used in defining engineering design problems*. National Science Foundation, *Envisioning the Future of Undergraduate STEM Education: Research and Practice*, Washington, DC.
- Daly, S. R., Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2016, April). *Disseminating the Design Heuristics evidence-based ideation pedagogy in engineering education*. National Science Foundation, *Envisioning the Future of Undergraduate STEM Education: Research and Practice*, Washington, DC.
- Preston, S., Vickers, B. D., & Seifert, C. M. (2016, May). *Effects of varying earth concepts on proenvironmentalism*. 28th Annual Convention of the *American Psychological Society Symposium*:

“Sustainability Science: Addressing Climate Change from the Human Side of the Equation.” Chicago, IL.

- Studer, J. A., Yilmaz, S., Daly, S. R., & Seifert, C. M. (2016, April) *Tackling the ‘right’ problems: Investigating cognitive strategies in understanding engineering problems*. Graduate and Professional Research Conference, Iowa State University, Ames, IA.
- Studer, J. A., Yilmaz, S., Daly, S. R., & Seifert, C. M. (2016, April) *Supporting innovative ideation behavior in problem exploration*. Center for e-Design Industry Advisory Board Annual Meeting, Chicago, IL.
- Vickers, B. D., Preston, S. D., & Seifert, C. M. (2016—*session organizers*). *Effects of varying earth concepts on proenvironmentalism*. Talk presented at the *Association for Psychological Science Convention*, Chicago, Ill.
- Preston, S. D., Seifert, C. M., Vickers, B. D. (2016). *Predicting proenvironmentalism from individual differences in earth concepts*. Talk presented at the Decision Consortium May Conference, University of Michigan, Ann Arbor, MI.
- Daly, S. R., Gonzalez, R., Gray, C. M., Leahy, K., McKilligan, S., & Seifert, C. M. (2015, Sept). Cultivating Innovation in Your STEM Classroom with Design Heuristics. *C2GEN Chautauqua Project*, Professional Development Online Short Course Series, NSF. (Authors in alphabetical order).
- Kramer, J., Daly, S., Yilmaz, S., Seifert, C., & Gonzalez, R. (2015). Leaps of imagination: Design Heuristics help students think outside the box and devise novel, more diverse solutions. *ASEE Prism Magazine - American Engineering Education Selects (AEE Selects)*. *Advances in Engineering Education*, October, 47).
- Gray, C. M., Yilmaz, S., Seifert, C. M., Daly, S., & Gonzalez, R. (2015). *What happens when creativity is exhausted? Design tools as an aid for ideation*. Paper Session at *American Educational Research Association Annual Meeting 2015*, Chicago, IL.
- Seifert, C. M. (2015). What is the role of financial incentives within a broader motivational strategy? *34<sup>th</sup> Annual Workplace Wellness Conference: ROI, Wellness Incentives, and Culture of Health: Pulling it All Together*, School of Public Health, University of Michigan, Ann Arbor.
- Seifert, C. M. (2015). *Intrinsic motivation and changing health behaviors*. AssetHealth Client Advisory Board, Chicago, IL.
- Seifert, C. M. (2015). *Idea generation*. Day of Design Thinking, School of Public Health, University of Michigan, Ann Arbor.
- Yilmaz, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2014). Different perspectives. *Engineering Designer Magazine – Institution of Engineering and Design Education Selects*, March, 24-27.
- Seifert, C. M. (2014). *What’s the problem?* Alumni Association, Distinguished Lecturer Series, Ann Arbor, MI.
- Seifert, C. M. (2014). *Steps to creativity*. Alumni Association, Distinguished Lecturer Series, Ann Arbor, MI.
- Kramer, J., Daly, S. R., Yilmaz, S., Seifert, C. M., & Gonzalez, R. (2014). Design processes in an upper-level design course: An evaluation of Design Heuristics. Poster presented at *the University of Michigan’s Center for Research on Learning and Teaching in Engineering’s 8<sup>th</sup> Annual Research and Scholarship in Engineering Education Poster Fair*, Ann Arbor, MI, USA.
- Seifert, C. M. (2014). *Enhancing creativity*. Ann Arbor City Club, Distinguished Lecturer Series, Ann Arbor, MI.
- Yilmaz, S., Daly, S. R., Seifert, C. M., & Gonzalez, R. (2014). Design Heuristics: An evidence-based tool to improve innovation. *Workshop at the Annual Meeting of the American Society for Engineering Education*. Indianapolis, IN.

- Seifert, C. M., Gonzalez, R., Yilmaz, S., & Daly, S. R. (2014). *Design Heuristics*. Advertising and Consumer Psychology Conference on *The Psychology of Design: Creating Consumer Desire*. Society for Consumer Psychology, Ann Arbor, MI, USA.
- Yilmaz, S., **Daly, S.**, Seifert, C. M., & Gonzalez, R. (2014). Different perspectives. *Engineering Designer Magazine – Institution of Engineering and Design Education Selects*, March, 24-27.
- Daly, S. R., Yilmaz, S., Christian, J. L., Seifert, C. M., & Gonzalez, R. (2014). 77 Design Heuristics. In H. S. Fogler & S. LeBlanc (eds.), *Strategies for Creative Problem Solving 3<sup>rd</sup> Ed.* New York: Prentice Hall.
- Yilmaz, S., Daly, S. R., Seifert, C., & Gonzalez, R. (2013). Design Heuristics: An evidence-based tool to improve innovation. *Workshop at the Annual Meeting of the American Society for Engineering Education*. Atlanta, GA.
- Seifert, C. M. (2013). *Enhancing Creativity and Preparing for Failure*. Alumni Association, Distinguished Lecturer Series, Ann Arbor, MI.
- Seifert, C. M. (2013). *Creativity on demand*. Design Science Program, University of Michigan.
- Daly, S. R., Yilmaz, S., Christian, J. L., Seifert, C. M., & Gonzalez, R. (2012). Uncovering design strategies: A collection of 77 examples helps students tap their own creativity. *ASEE Prism Magazine - Journal of Engineering Education Selects (JEE Selects)*, 22(4), December, 41.
- Daly, S., Yilmaz, S., Christian, J., Seifert, C., and Gonzalez, R. (2011). *Design Heuristics for Idea Generation*. Available at <http://www.DesignHeuristics.com>.
- Seifert, C. M. (2011). Chance encounters: Preparing for opportunities. *Osher Lifelong Learning Institute*, Distinguished Lecture Series, Ann Arbor, MI.
- Seifert, C. M., & Hart, J. (2011). Why ‘Carrots and Sticks’ don’t change behavior: Helping employees want to become healthier. *21st Annual Art & Science of Health Promotion Conference: Capturing the Wisdom of Practice and the Rigor of Research - Discovering the Best Health Promotion Strategies*, Colorado Springs, Colorado.
- Yilmaz, S., Daly, S., Seifert, C. M., & Gonzalez, R. (2011). *The role of heuristics in creative and innovative robust designs*. Civil, Mechanical, and Manufacturing Innovation Conference, National Science Foundation, Atlanta, Georgia.
- Gonzalez, R., Seifert, C. M., & Yoon, C. (2010). *The social psychology of seatbelt use*. University of Michigan Transportation Research Institute, Technical Report UMTRI-2010-16.
- Seifert, C. M. (2009). *Ethics in human subjects research*. Colloquium in the Department of Anthropology, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (April, 2009). *Ethics in professional life*. Panel presentation hosted by the LSA Honors Council, College of Literature, Science, and the Arts, and the Center for Ethics in Public Life, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (February, 2009). *How does expertise relate to competency in the patient encounter?* Decision Consortium, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (December, 2008). *Determining professional competency in the patient encounter*. Medical Education Department, University of Michigan Medical School, Ann Arbor, MI
- Seifert, C. M. (November, 2008). Errors in complex cognitive tasks: The case of medicine. *The McDonnell Foundation Conference on Complex Cognition in Clinical Medicine*, Arizona State University, Phoenix, AZ.
- Seifert, C. M., Garrison, K. G., & Koschmann, T. (July, 2008). Expertise and competence in the patient encounter: Knowing when to stop. Reviewed Symposium, *Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society*, Washington, D.C.
- Seifert, C. M. (2008). *Ethics in international research*. The International Institute, University of Michigan, Ann Arbor, MI.

- Kelly, J., Papalambros, P. Y., & Seifert, C. M. (2008). Interactive Genetic Algorithms for use as creativity enhancement tools. *AAAI Spring Symposium on Creativity*, Palo Alto, CA.
- Seifert, C. M. (December, 2007). *Competency in the exam encounter: Finding the problem*. Colloquium, Southern Illinois University, School of Medicine, Springfield, IL.
- Seifert, C. M. (October, 2007). Now why didn't I think of that? The cognitive processes that create the obvious. *Thirteenth Annual Lewis & Clark Business Law Forum*, Portland, Oregon.
- Seifert, C. M. (2005). (Ed.) Mind and brain: A Festschrift in honor of Edward E. Smith. *PsychExtra*, Washington, D.C.: American Psychological Association.
- Seifert, C. M. (August, 2005). Case-based reasoning by human experts. Sixth International Conference on Case-Based Reasoning, Chicago. *Lecture Notes in Computer Science vol. 3620*, 4. Berlin: Springer.
- Seifert, C. M. (June, 2004). *The psychology of the Learning Sciences*. School of Education and School of Information, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (May, 2003). *The Guilty Knowledge Effect*. Midwest Psychological Association, Chicago, IL.
- Seifert, C. M. (July, 2002). *Reasoning with and about information in memory*. Southern Illinois University, School of Medicine, Springfield, IL.
- Star, J. R., & Seifert, C. M. (April, 2002). *Re-conceptualizing procedural knowledge: Flexibility and innovation in equation solving*. Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Seifert, C. M. (May, 1999). *Memory for the status of past information*. Colloquium, National Science Foundation, Behavioral Science Division, Arlington, VA.
- Seifert, C. M. (April, 1999). *Jurors' use of stricken information: Unringing the bell*. Program on "Winning the Jury: The Secrets of Effective Courtroom Advocacy," Litigation Section of the State Bar of Michigan, Troy, MI.
- Seifert, C. M. (November, 1998). "Nothing but the truth:" *Memory for stricken information*. Michigan State University, Lansing, MI.
- Seifert, C. M. (April, 1998). *Jurors' use of stricken information*. Panel on "Dealing with Eyewitness Testimony," Litigation Section of the State Bar of Michigan, Ann Arbor, MI.
- Seifert, C. M. (November, 1997). Detecting guilty knowledge using response times. *Thirty-Eighth Annual Meeting of the Psychonomic Society*, Philadelphia, PA.
- Seifert, C. M. (April, 1997). *How to forget you ever heard this*. John Kendall Lecture Series, Gustavus Adolphus College, St. Peter, MN.
- Seifert, C. M. (April, 1997). *Noticing opportunities in planning*. University of Chicago, Dept. of Psychology, Chicago, IL.
- Seifert, C. M. (March, 1997). *Correcting misinformation in memory*, University of Illinois, Dept. of Psychology, Urbana, IL.
- Seifert, C. M. (February, 1997). *Noticing opportunities in planning*. Northwestern University, Dept. of Psychology and Dept. of Computer Science, Evanston, IL.
- Seifert, C. M. (November, 1996). Predictive encoding of plans facilitates recognizing opportunities. Research Presentation, *Thirty-Seventh Annual Meeting of the Psychonomic Society*, Chicago, IL.
- Seifert, C. M. (July, 1995). Prospective reminding: Planning for opportunities. *Second International Conference on Memory*, Abano Terme, Italy.
- Seifert, C. M. (May, 1995). How to forget you ever heard this. *Midwestern Psychological Association*, Chicago, IL.
- Seifert, C. M. (November, 1994). *Correcting misconceptions in memory*. Colloquium, Depts. of Philosophy

- and Psychology, University of Waterloo, Canada.
- Seifert, C. M. (October, 1994). *Memory-based reasoning*. Colloquium, Dept. of Psychology, Columbia University, New York.
- Seifert, C. M. (July, 1994). *Predictive encoding: Opportunism in planning*. Colloquium, Northwestern University, Cognitive Science Program, Evanston, IL.
- Seifert, C. M. (June, 1993). Preparing for opportunities. Symposium on Computational Models of Problem Solving, *Fifteenth Annual Meeting of the Cognitive Science Society*, Boulder, CO.
- Seifert, C. M. (June, 1993). Correcting explanations in memory. *Third Annual Meeting of the Society for Text and Discourse*, Boulder, CO.
- Seifert, C. M. (May, 1993). Expertise in planning. *Third International Workshop on Human and Machine Cognition*, Seaside, FL.
- Seifert, C. M. (January, 1993). Case-based reasoning and comprehension. *Fourth Annual Winter Text Conference*, Jackson Hole, WY.
- Seifert, C. M. (September, 1992). Case-based planning. Decision Behavior Consortium, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (September, 1992). Case-based planning. Conference on Hybrid Models of Learning, Woods Hole, MA.
- Seifert, C. M. (May, 1992). Representation and learning. Symposium on Learning in Honor of Wilbert McKeachie, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (May, 1992). Representation and problem solving. *Midwest Psychological Association*, Chicago, IL.
- Seifert, C. M. (October, 1991). Case-based reasoning and learning. School of Education, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (September, 1991). Encoding issues in memory. *Conference on Complex Models of Human Thought*, Atlanta, GA.
- Seifert, C. M. (July, 1991). Beyond mimicry. *Eighth International Workshop on Machine Learning*, Chicago, IL.
- Seifert, C. M. (January and October, 1990). The economics of social relationships. Institute for Social Research and Department of Sociology, University of Michigan, Ann Arbor, MI.
- Seifert, C. M. (March, 1990). A case for cases. AAAI Spring Symposium on Case-Based Reasoning, Palo Alto, CA.
- Seifert, C. M. (March, 1990). Content-based inferences in text. *Conference on Inference Generation During Discourse Comprehension*, Memphis State University, TN.
- Seifert, C. M. (1990). Computing on Campus: Positive but predictable. *Contemporary Psychology*, 35(7), 668-669.
- Seifert, C. M. (June, 1989). Opportunistic memory. *Conference on Complex Models of Human Thought*, Ithaca, NY.
- Seifert, C. M. (May, 1989). Analogy and Case-Based Reasoning. Panel Chair, *Second DARPA Workshop on Case-Based Reasoning in AI*, Pensacola, FL.
- Seifert, C. M. (November, 1988). A retrieval model of case-based memory. *AAAI Workshop on Case-Based Reasoning*, Minneapolis, MN.
- Seifert, C. M. (January, February and March, 1988). Thematic features in analogical reminding. Princeton University, University of Chicago, University of Virginia, University of California-Santa Barbara, University of Arizona, University of Michigan.

Seifert, C. M. (November, 1987). East coast meets west coast: Why we need symbolic models of thought? Colloquium, University of California, San Diego.

Seifert, C. M. (July, 1987). A case study of on-the-job learning for group performance. Aeronautics Human Factors Division, NASA-Ames Research Center, CA.

Seifert, C. M. (1987). Mental Representations of Social Knowledge: A Computational Approach to Reasoning About Relationships. Yale University Dissertation.  
<http://hdl.handle.net/10079/bibid/14746376>

Seifert, C. M. (February and March, 1986). The nature of reminding. Rutgers University, Harvard University, Columbia University, University of California-Santa Cruz, University of California-San Diego.

## Media Appearances

NextGov (Oct. 15, 2020). “Ideas from others may prevent 'Fixation' on your first solutions” by Jared Wadley. <https://www.nextgov.com/ideas/2020/10/ideas-others-may-prevent-fixation-your-first-solutions/169274/>

Psychology Today (Oct. 12, 2020). “Improvisation leads to increased participation, even online,” by Clay Drinko. <https://www.psychologytoday.com/us/blog/play-your-way-sane/202010/improvisation-leads-increased-participation-even-online>

Futurity (Apr 17, 2020). “Improv training can help you cope with uncertainty,” by Jared Wadley. <https://www.futurity.org/improv-training-uncertainty-creativity-2340012/>

Medical Xpress (Apr. 15, 2020). “No kidding: Theater improv makes you happier, creative, tolerant of uncertainty.” <https://medicalxpress.com/news/2020-04-kidding-theater-happier-creative-tolerant.html>

JSTOR Daily (Nov. 20, 2019). “The Incredibly True Story of Fake Headlines,” by Chi Luu. <https://daily.jstor.org/the-incredibly-true-story-of-fake-headlines/>

Futurity (Dec. 14, 2018). “Improv training may curb anxiety for teens,” by Jared Wadley. <https://www.futurity.org/anxiety-improv-training-teens-1932362/>

Environmental Defense Fund Blog (July 18, 2019). “The Groundwater Game: A new hands-on way to learn about groundwater management,” by Christina Babbitt. <http://blogs.edf.org/growingreturns/2019/07/18/new-groundwater-game-teaches-sustainable-management-trading/>

The Guardian (Feb. 28, 2018). 'Taking them down fuels it more': why conspiracy theories are unstoppable,” by Sam Levin. <https://www.theguardian.com/us-news/2018/feb/28/florida-shooting-conspiracy-theories-youtube-takedown>

FASTCOMPANY (Feb. 1, 2018). “Why Your Brain Clings To False Beliefs (Even When It Knows Better),” by Annie Duke. <https://www.fastcompany.com/40528587/why-your-brain-clings-to-false-beliefs-even-when-it-knows-better>

Michigan Radio/NPR Digital Network, Stateside with Cynthia Canty (Jan. 2, 2018). “A psychologist explains why we’re so easily fooled by fake stories online” by Stateside Staff. <http://michiganradio.org/post/psychologist-explains-why-we-re-so-easily-fooled-fake-stories-online>

The Guardian (Dec. 4, 2017). "US gun violence spawns a new epidemic: conspiracy theorists harassing victims," by Sam Levin and Lois Beckett. <https://www.theguardian.com/us-news/2017/nov/28/us-guns-mass-shootings-hoax-conspiracy-theories>

New York Times (Oct. 20, 2017). "How Fiction Becomes Fact on Social Media," by Benedict Carey. [https://www.nytimes.com/2017/10/20/health/social-media-fake-news.html?em\\_pos=large&emc=edit\\_sc\\_20171024&nl=science-times&nid=33563121&ref=img&te=1](https://www.nytimes.com/2017/10/20/health/social-media-fake-news.html?em_pos=large&emc=edit_sc_20171024&nl=science-times&nid=33563121&ref=img&te=1)

JSTOR Daily (Oct. 16, 2018). "Has the Internet Weakened Our Political Institutions?" by Alexandra Samuel. <https://daily.jstor.org/has-the-internet-weakened-our-political-institutions/>

EuroScientist Science Communication (July 5, 2017). Holding onto lies! Unlocking the cognitive mechanism behind misinformation," by Vedrana Simičević. <https://www.euroscientist.com/holding-on-to-lies/>

INSEAD Knowledge (March 16, 2017). "Responding to "Fake News" in the Post-Truth Era," by Ian Anderson. <http://knowledge.insead.edu/blog/insead-blog/responding-to-fake-news-in-the-post-truth-era-5526#vAgPfs4dvyb7Qz5l.99>

Politico Magazine (Jan. 20, 2017). "Trump's lies vs. your brain," by Maria Konnikova. <https://www.politico.com/magazine/story/2017/01/donald-trump-lies-liar-effect-brain-214658>

Health.com (May 28, 2015). "4 Habits That Set You Up for Good Luck," by Kate Rockwood. <https://www.health.com/mind-body/4-habits-that-set-you-up-for-good-luck>

Huffington Post (April 13, 2015). "Life decisions and career paths – Leave it all to chance?" by Lee Schneider.

BBC (Nov. 24, 2014). "How to debunk falsehoods," by Tom Stafford. <https://www.bbc.com/future/article/20141113-the-best-way-to-debunk-myths>

WAMC Northeast Public Radio (Jan. 18, 2013). Academic Minute: "Dislodging misinformation."

UPI.com (Oct. 9, 2012). "Repeated information easy to believe."

ScienceDaily (Sept. 19, 2012). "Misinformation: Why it sticks and how to fix it," by the Association for Psychological Science. [www.sciencedaily.com/releases/2012/09/120919191212.htm](http://www.sciencedaily.com/releases/2012/09/120919191212.htm)

Scientific American (October 4, 2012). "Diss Information: Is There a Way to Stop Popular Falsehoods from Morphing into "Facts"?" by Carrie Arnold.

Men's Health (Oct. 3, 2012). "Obama vs. Romney: The scientific choice," by Cassie Shortsleeve.

NBC News (Oct. 1, 2012). "Why some of us refuse to face facts (Yes, "birthers," that includes you)," by Bill Briggs.

You Are Not So Smart Podcast (Feb. 13, 2017). "How to fight back against the backfire effect," by David McRaney. <https://boingboing.net/2017/02/13/how-to-fight-back-against-the.html>

U.S. News and World Report. (Dec. 15, 2010). "Careful actions can lead to good luck," by Meryl Davids Landau.

Kevyn Burger Show, FM 107.1, Minneapolis, Mn. (April 27, 2009). Interview on "How to get lucky." <http://www.fm1071.com/ondemand/index.shtml?audioid=1981>

O! Magazine. (February, 2009). "How to get lucky," by Ben Sherwood. [http://www.oprah.com/article/omagazine/200902\\_omag\\_making\\_your\\_ownLuck](http://www.oprah.com/article/omagazine/200902_omag_making_your_ownLuck)

The Todd Mundt Show, National Public Radio, WUOM, Ann Arbor, MI. (September, 2002). Interview on "Flashbulb memories and 9-11."

New Scientist (June, 2001). "Nowhere to hide," by John McCrone.

PBS Television, WNET-New York. (September, 1993). *Innovations* program series: "A matter of teamwork."

*Innovations* Program PBS Television, WNET-New York (September, 1993). Cross-disciplinary collaboration. series: "A matter of teamwork." (Original Broadcast)

## Teaching

*Introduction to Psychology*. Undergraduate survey course on the discipline of psychology, focusing on natural science approaches and naturalistic research studies.

*Research Laboratory in Psychology*. Undergraduate course on research methods in psychology using computer-based and in-the-world lab exercises and advanced writing assignments.

*Seminars in Cognitive Science*. Graduate and undergraduate courses reviewing current research in the field including creativity, memory and problem solving, thinking, and "cognition in the wild."

*Fundamentals of Human Behavior*. Graduate survey course of major psychological findings and their implications for information technology, product design, and cooperative work.

*Creativity*. Upper-level seminar course for psychology, *Cognitive Science*, and *Biopsychology*, *Cognition*, and *Neuroscience* majors on the creative process and science of creative cognition.

*Science of Design Thinking*. Interdisciplinary graduate course covering the psychology of the design process.

## Teaching Grants

*LSA New Initiative New Infrastructure (NINI) Grant*. UMTurk: Leveraging Live, Online Data Explorations in Psychology Research Methods. Co-I, with Julie Boland, \$43,200, 7/2018-7/2020.

*CRLT Faculty Development Fund*. Engaging students in the massive Psychology classroom through the Case Study Method. \$6000, 9/1/2016-8/1/2020.

*CRLT Large Course Initiative Award*. Creating laboratory studies for psychology research methods. \$2000, 5/1/2017-5/1/2018.

*UMS Mellon Faculty Institute on Arts Academic Integration*. Workshop on incorporating the arts in *Psychology of Creativity* course. May 6-7, 2014, \$2500.

*Faculty Dialogues Institute*. Workshop on strategies for cultivating dialogue about social identities and power in the *Peer Advising* courses. May 15-16, 2013, \$750.

*Assessing Deep Knowledge of Statistical Concepts*. Co-PI, with Richard Gonzalez (PI). Investigating Student Learning (ISL) Grant, Center for Research on Teaching and Learning, \$4000, 2010-2012.

*Naturalistic Observation in Psychology*. Teaching with Technology Institute, Center for Research on Teaching and Learning, \$2500, 2005.

*Psychology in the Wild*. LSA Honors Program, Honors Seminar Development Competition, \$9000, 2004.

*Cognition in the Wild: Methods for Studying Complex Cognitive Tasks*. Office of the Vice President for Research and Rackham Graduate School, Distinguished Faculty/Graduate Student Seminar, \$8,000, 1997-1998.

*Active Learning in the Cognitive Psychology Laboratory*. Center for Research on Learning and Teaching, Faculty Development Fund, \$4,970, 1997-1998.

*Developing Critical Thinking Skills*. College of Literature, Sciences, and Arts, and the Center for Research on Learning and Teaching, Postdoctoral Fellowship, \$5000, 1990-1991.

*Current Work in Cognitive Science*. Rackham School of Graduate Studies, Fund to Enhance Graduate Education, \$3,000, 1989-1990.

## Professional Memberships and Activities

Professional Leadership:

Contributor, *A 20-Year Community Roadmap for Artificial Intelligence Research in the US*, Workshop & Report, Computing Community Consortium (CCC) and AAAI, 2018-2019

Finance Committee Member, Cognitive Science Society, 2004-2005

Executive Officer, Cognitive Science Society, 1997-2002

Chair of Governing Board, Cognitive Science Society, 1997-1998

Governing Board, Cognitive Science Society, 1994-2002

Editorial Boards:

*Design Science*, 2014-

*Animal Sentience*, 2015-

*Cognitive Science*, 2005-

*Journal of Educational Psychology*, 2008-2018

*Journal of the Learning Sciences*, 1994-2009

*Journal of Experimental Psychology: Learning, Memory, and Cognition*, 1994-1997

Associate Editor: *Cognitive Science*, 2001-2003, 2015-; *Design Science*, 2014-

Acting Editor: *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 2011-2012

Consulting Editor: *Memory and Cognition*, 1994-1997, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 2008-

Ad Hoc Journal Reviewer:

*Applied Cognitive Psychology*

*American Psychologist*

*Behavior Research Methods*

*Brain and Behavioral Sciences*

*Cognition*

*Cognition and Emotion*

*Cognition and Instruction*

*Cognitive Psychology*

*Cognitive Science*

*Cognitive Research: Principles & Implications*

*Current Directions in Psychological Science*

*Design Studies*

*Developmental Psychology*

*European Journal of Psychology of Education*

*Fisheries*

*Frontiers: Psychology*

*Human Communication Research*

*Journal of Applied Psychology*

*Journal of Applied Research in Memory & Cognition*

*Journal of Behavioral Decision-Making*

*Journal of Computer-Mediated Communication*

*Journal of Creative Behavior*

*Journal of Economic Psychology*

*Journal of Educational Psychology*

*Journal of Engineering Design*

*Journal of Engineering Education*

*Journal of Experimental Psychology: Applied*

*Journal of Experimental Psychology: General*

*JEP: Learning, Memory, & Cognition*

*Journal of Experimental Social Psychology*

*Journal of Human Computer Interaction*

*Journal of the Learning Sciences*

*Journal of Media Psychology*

*Journal of Memory and Language*

*Knowledge-Based Systems*

*Machine Learning*

*Memory and Cognition*

*Organizational Behavior and Decision Sciences*

*PeerJ*

*PLOS One*

*Proceedings of the National Academy of Science*

*Psychological Review*

*Psychological Science*

*Psychonomic Bulletin and Review*

*Public Opinion Quarterly*

*Quarterly Journal of Experimental Psychology*

*Research in Engineering Design*

*Review of Educational Research*

Conference Leadership:

Conference Organizing Committee: Cognitive Science Society Conference, 1991, 2018, 2019

Program Committee Member:

International Conference on Engineering and Product Design Education (E&PDE), 2015-2019

ICED17, the 21<sup>st</sup> International Conference on Engineering Design in Vancouver, Canada, 2017

Computer Supported Cooperative Learning Conference, 2015- 2017

American Society for Engineering Education, 2015, 2016, 2019

Consumer Psychology Society Conference Co-Chair, 2014

International Conference of the Learning Sciences, 2004-2005, 2011-2012, 2014-2015, 2019-2020

Cognitive Science Society Conference, 1991, 1996-2001, 2004-2007, 2012, 2015, 2017-2019

ACM Creativity & Cognition Conference, 2013

Conference on Computer Supported Cooperative Work, 2005

International Conference on Principles of Knowledge Representation and Reasoning, 2004

AI & Education Conference, 2004

Midwest Psychological Association Conference, 1997-2001

AI Planning Systems Conference, 1994

American Association for Artificial Intelligence National Conference, 1993

Grant Reviews:

Grant Review Panel Member:

National Science Foundation, Science of Learning Program, 2005, 2008-2009

National Science Foundation, Graduate Research Fellowship Program, 2008-2009

National Science Foundation, Program in Artificial Intelligence and Cognitive Science, 2004

NRA Panel, NASA Intelligent Systems Program, 2004

Technical Chair, Advisory Panel, National Aviation and Space Administration, 1998, 1999

Ad Hoc Grant Reviewer: National Science Foundation: Computer Science and Behavioral Sciences Divisions, and Air Force Office of Scientific Research

Student Grant Award Reviewer: National Academy of Education/Spencer Dissertation Fellowship Program, 2015; Research and Development (RDO) of The Education University of Hong Kong (EdUHK), 2018

External Review Committee Member: Arizona State University, Educational Psychology, 2000;

Office of the Vice Provost, Office for Research and Sponsored Programs, Central Michigan University, 2008

Promotion Reviews: Northwestern University, Brown University, Arizona State University, University of Illinois at Champaign-Urbana, Washington State University, University of Wisconsin-Madison, University of S. Florida, University of Toronto

Professional Memberships:

American Association for Engineering Education, American Educational Research Association, American Psychological Society, Brain and Behavioral Sciences, Cognitive Science Society, the Design Society, International Society for the Learning Sciences, Society for Applied Research in Memory & Cognition. American Psychological Association Division 2: Society for the Teaching of Psychology

Consulting:

Publishing Consultant: Worth Publishers, Academic Press, Blackwell Publishing, Cambridge University Press, Jones and Bartlett Publishers, Lawrence Erlbaum Associates, Elsevier Press, Worth, McGraw-Hill, Flat

World Press, Pearson, Allyn and Bacon, and the MIT Press.  
Design Heuristics, L.L.C. (www.designheuristics.com), 2012-  
AssetHealth, Inc., 2008-2017  
Toolwire, Inc., 2012-2013  
IDEO Chicago, Inc., 2005-2007; 2009-2012  
State Appellate Defender Office, Detroit, 2012-2019  
Court Testimony as Expert Witness on Eyewitness Memory  
37<sup>th</sup> Circuit Court for the County of Calhoun, MI, 2016, 2018  
6<sup>th</sup> Circuit Court for the County of Oakland, MI, 2018  
16<sup>th</sup> Circuit Court for the County of Macomb, MI, 2016, 2017  
31<sup>st</sup> Circuit Court for the County of St. Clair, MI, 2015  
3<sup>rd</sup> Circuit Court for the County of Wayne, MI, 2012, 2015  
30<sup>th</sup> Circuit Court for the County of Ingham, MI, 2012  
Institute for the Learning Sciences, Northwestern University, 1997  
Ameritech Network Services, Human Factors Division, 1994-1995  
Science Advisory Boards:  
AssetHealth, Inc. 2006-2019  
InfoAlly, Inc., 2000-2006  
Nonlinear Dynamics, Inc., 1998-2001

## University Service

Augmented Executive Committee Member, Department of Psychology, 1989-1993, 1995-1996, 1998-2000, 2005-2007, 2009-2010, 2015-2017, 2020-2021  
Assistant Professor Review Panel, Department of Psychology, 2018-2019, 2020-2021  
Lecturer Review Panel, Department of Psychology, 2019-2020  
Member, Awards Committee, Department of Psychology, 2018-2020  
Director, Design Science Interdisciplinary Graduate Program, Rackham Graduate School, 2018-2019  
Faculty Ally, Rackham Graduate School, 2018-2019  
Member, Provost's Task Force on *Michigan Undergraduate Education in The Third Century*, 2018-2019  
Judge, Sweetland Writing Prize, 2017-2018  
Member, Psychology Annual Review Committee, 2017-2018  
Member, CRLT Foundational Course Design Group, 2017-2018  
Chair, Advance Faculty Launch Committee, College of LSA, Department of Statistics, 2016-2017; Department of Communications, 2019-2020; Committee Member, College of Engineering, 2015-2016  
Faculty Representative, Steering Committee for *Academic Reporting Tools (ART2.0) Project*, 2016-2017  
Tenure & Promotion Review Committee Member, Department of Psychology, 2005-2009, 2011; Chair, 2006-2007, 2009, 2016-2019; Co-Chair, 2011  
Faculty Representative, President Schlissel's Committee on Landfill Waste Reduction, 2014-2015  
Program Chair, Design Science Graduate Program, 2013-2015  
LSA Faculty Representative, Campuswide Entrepreneurship Advisory Committee, 2013-2015  
Reviewer, Office of the Vice President for Research, Faculty Grant Review Program, 2007-2011, 2014, 2019

Academic Affairs Advisory Committee Member, Provost's Office and Senate Advisory Committee on University Affairs, 2011-2013, Chair, 2012-2013

Associate Chair, Teaching and Student Affairs (Graduate and Undergraduate Programs), Department of Psychology, 2010-2013; *American Psychological Association of Graduate Students (APAGS) Department Award*, 2011

Faculty Representative, Provost's Committee on the 3<sup>rd</sup> Century Initiative: Student Learning Committee, 2011-2013

Faculty Representative, Provost's Committee on Tenure and Promotion Review, 2006-2012

Thurnau Professorship Selection Advisory Committee Member, 2011-2012

Faculty Representative, LSA Testing Accommodations Planning Committee, 2011

LSA Honors Program Faculty Council Member, 2003-2005, 2008-2010

Executive Committee Member, Institutional Review Board for Health Sciences and Behavioral Sciences, 2009-2010

Faculty Representative, Institutional Review Board for Health Sciences and Behavioral Sciences, 2007-2010

Co-Chair, Institution Review Board for Behavioral Sciences, 2007-2009

Faculty Representative, Advisory Committee on Human Research Compliance Review, 2007-2009

Faculty Representative, Office of the Vice President of Research, Human Research Coordinating Council, 2007-2009

Faculty Grievance Review Board Member, Cognate Panel, 2005-2008

Director, Undergraduate Honors Research Program, Department of Psychology, 2001-2006

Faculty Search Committee Member, Department of Psychology, 1990-1995, 1997-1999, 2001-2002, 2003-2004

Faculty Representative, LSA Dean's Advisory Committee on the Honors Program, College of L.S.A., 2000-2001

Faculty Representative, Institutional Review Board: Behavioral Sciences, 1997-2000

Executive Committee Member, Department of Psychology, 1991-1993, 1998-2000

Faculty Representative, Divisional Board, Rackham Graduate School, 1995-1996, 1997-1999

Associate Chair for Computing, Department of Psychology, 1998; Committee Member, 1993-1997

Admissions Committee Member, Cognitive Area, Department of Psychology, 1988-1991, 1993-1996, & 1997-1998

Area Chair, Cognitive Program, Department of Psychology, 1994-1996; Acting Chair, 1993

Faculty Representative, Dean's Advisory Committee on Computational Resources, College of LSA, 1993-1995

Executive Committee Member, Interdisciplinary Programs: Culture and Cognition Program, Combined Program in Education and Psychology, Cognitive Science and Cognitive Neuroscience Program, Weinberg Institute for Cognitive Science