

Bonnie Brinton Anderson, Ph.D.
Professor of Information Systems
IB and Eleanor Romney Distinguished Professor
Associate Dean of Faculty and Research
Marriott School of Business
Brigham Young University
730C TNRB, Provo, UT 84602
(801) 422-5704
bonnie_anderson@byu.edu
Updated January 6, 2023

EDUCATION

Doctor of Philosophy

H. John Heinz III School of Public Policy and Management
Carnegie Mellon University, August 2001
Emphasis in Information Systems and Decision Sciences

Master of Philosophy

H. John Heinz III School of Public Policy and Management
Carnegie Mellon University, May 2001

Master of Accountancy

Marriott School of Management
Brigham Young University, April 1995
Emphasis in Information Systems Consulting

Bachelor of Science

Marriott School of Management
Brigham Young University, April 1995
Major: Accounting
Minors: Japanese, Business Administration

RESEARCH

Peer Reviewed Journal Publications

**denotes student involvement*

16. Kirwan, B., Vance, A., Jenkins, J., **Anderson, B.**, 2022 “Embracing Brain and Behavior: Designing Programs of Complementary Neurophysiological and Behavioral Studies,” *Information Systems Journal*.
15. Kirwan, B., *Bjornn, D., **Anderson, B.**, Vance, A., Eargle, D. Jenkins, J., 2020 “Repetition of Computer Security Warnings Results in Differential Repetition

- Suppression Effects as Revealed with Functional MRI,” *Frontiers in Psychology*, 11 (3403), doi 10.3389/fpsyg.2020.528079.
14. Vance, A., Jenkins, J., **Anderson, B.**, *Bjornn, D., Kirwan, B. 2018 “Tuning Out Security Warnings: A Longitudinal Examination of Habituation through fMRI, Eye Tracking, and Field Experiments,” *MIS Quarterly*, 42 (2), pp. 355–380.
 13. **Anderson, B.**, Jenkins, J., Vance, A., Kirwan, B., Eargle, D. 2016 “Your Memory is Working Against You: How Eye Tracking and Memory Explain Habituation to Security Warnings,” *Decision Support Systems*, 92, pp. 3-13. Available online at <http://dx.doi.org/10.1016/j.dss.2016.09.010>
 12. **Anderson, B.**, Vance, A., Kirwan, B., Jenkins, J., Eargle, D. 2016, “From Warning to Wallpaper: Why the Brain Habituates to Security Warnings and What Can be Done about It,” *Journal of Management Information Systems*, 33(3), pp. 713-743.
 11. Jenkins, J., **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D. 2016, “More Harm than Good? How Security Messages that Interrupt Make Us Vulnerable,” *Information Systems Research*, 27(4), pp. 880-896. ISSN 1047-7047 (print): ISSN 1526-5536 (online). **Best Published Paper Award 2016.**
 10. **Anderson, B.**, Vance, A., Kirwan, B., *Eargle, D., Jenkins, J. 2016, “How Users Perceive and Respond to Security Messages: A NeuroIS Research Agenda and Empirical Study,” *European Journal of Information Systems*, 25 (4), pp. 364-390.
 9. **Anderson, B.**, Kirwan, B., Eargle, D., *Jensen, S., Vance, A. 2015. “Neural Correlates of Gender Differences and Color in Distinguishing Security Warnings and Legitimate Websites: A Neurosecurity Study,” *Journal of Cybersecurity*, 1 (1), pp. 109–120.
 8. Vance, A., **Anderson, B.**, Kirwan, B., *Eargle, D. 2014. “Using Measures of Risk Perception to Predict Information Security Behavior: Insights from Electroencephalography (EEG),” *Journal of the Association for Information Systems*, 15 (10), pp. 679-722, 2014.
 7. **Anderson, B.B.**, Hansen, J.V., and Lowry, P.B. 2009. "Creating Automated Plans for Semantic Web Applications through Planning as Model Checking," *Expert Systems with Applications*, Vol. 36, pp. 10595-10603.
 6. Hansen, J.V., McDonald, J.B., Albrecht, C.C, Dean, D.L., **Anderson, B.B.** 2007. “A Semantic Web Data Retrieval Implementation with an Adaptive Model for Supporting Agent Decision Structures,” *Electronic Commerce Research*, Vol 7, pp. 5-17.
 5. **Anderson, B.B.**, Hansen, J.V., Lowry, P.B., Summers, S. 2006. “The Application of Model Checking for Securing E-Commerce Transactions,” *Communications of the ACM*, Vol. 49, No. 6, pp. 97-101.

4. **Anderson, B.B.**, Hansen, J.V., Lowry, P.B., Summers, S. 2006. "Standards and Verification for Fair-exchange and Atomicity in E-Commerce Transactions," *Information Sciences*, Vol. 176/8 pp 1045-1066.
3. **Anderson, B.B.**, Hansen, J.V., Lowry, P.B., Summers, S. 2005. "Model Checking for E-Commerce Control and Assurance," *IEEE Transactions: Systems, Men, and Cybernetics*, Vol. 35, No. 3.
2. **Anderson, B.B.**, Hansen, J.V., Lowry, P.B., Summers, S. 2005. "Model Checking for Design and Assurance of E-Business Processes," *Decision Support Systems*, (39), pp. 333-344.
1. **Anderson, B.B.**, Bajaj, A, Gorr, W. "2002. An Estimation of the Decision Models of Senior IS Managers When Evaluating the External Quality of Organizational Software," *The Journal of Systems and Software*, 61, pp. 59-75.

Peer Reviewed Conference Articles

31. Kirwan, B., Eargle, D., **Anderson, B.**, Jeff Jenkins, J., Vance, A., "Distinguishing the Difference: Critical Warnings and Non-essential Notifications," Proceedings of the 2019 Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Bossier City, Louisiana, October 2019.
30. Vance, A., Eargle, D., Jenkins, J., Kirwan, B., **Anderson, B.**, "The Fog of Warnings: How Non-essential Notifications Blur with Security Warnings." In *Fifteenth Symposium on Usable Privacy and Security (SOUPS)*, San Jose, CA. 2019 23% acceptance rate.
29. Kirwan, B., **Anderson, B.**, Eargle, D. Jenkins, J., Vance, A., "Using fMRI to Measure Stimulus Generalization of Software Notification to Security Warnings," presented at the NeuroIS Retreat, Vienna, Austria, published in *Information Systems and Neuroscience*, 93-99. 2019.
28. **Anderson, B.**, Bjornn, D., Jenkins, J., Kirwan, B., Vance, A., "Improving Security Message Adherence through Improved Comprehension: Neural and Behavioral Insights," Americas Conference on Information Systems (AMCIS), New Orleans, LA August 2018.
27. Vance, A., Jenkins, J., **Anderson, B.**, Bjornn, D., Kirwan, B., "Comprehending Comprehension of Security Warnings: Insights from Eye Tracking, fMRI, and Behavior," Proceedings of the 2018 Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Capetown, South Africa, June 2018.
26. Jenkins, J., Vance, A., Kirwan, B., Bjornn, D., **Anderson, B.**, "Improving Your Behavioral Study with a Complementary Neurophysiological Study and Vice Versa," Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), Montréal, Canada, 2018. In *Conference Proceedings*. (Considered a Tier 1 publication in Computer Science).

25. Vance, A., Jenkins, J., **Anderson, B.**, Kirwan, B., Bjornn, D., "Why and How to Design Complementary NeuroIS and Behavioral Experiments," Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2016. *In Conference Proceedings.*
24. Vance, A., Kirwan, B., *Bjornn, D., Jenkins, J., **Anderson, B.**, "What Do We Really Know about How Habituation to Warnings Occurs Over Time? A Longitudinal fMRI Study of Habituation and Polymorphic Warnings," Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), Denver, CO, 2017. *In Conference Proceedings.* (Considered a Tier 1 publication in Computer Science).
23. **Anderson, B.**, Jenkins, J., Vance, A., Kirwan, B., *Bjornn, D. "It All Looks the Same to Me: Security Warning and System Notification Generalization Captured through Eye Tracking," *Workshop on Information Security and Privacy (WISP)*, Dublin, Ireland, December 2016. *In Conference Proceedings.*
22. *Bjornn, D.K., *Howell, A.L., **Anderson, B.B.**, Vance, A., & Kirwan, C.B. "Evidence for consolidation of pattern-separated memories in ventromedial prefrontal cortex but not hippocampus," Program No. 637.13. *Neuroscience 2016 Abstracts.* San Diego, CA: Society for Neuroscience, 2016. Online.
21. **Anderson, B.**, Vance, A., Jenkins, J., Kirwan, B., *Bjornn, D. "I Can't Spot the Difference: An Eye Tracking Study Examining Generalization between Security Warnings and System Notifications," The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Albuquerque, NM, October 2016. *In Conference Proceedings.*
20. Jenkins, J., **Anderson, B.**, Vance, A., *Jensen, S., "When Training Gets Trumped: How Dual-Task Interference Inhibits Security Training," European Conference on Information Systems (ECIS), Istanbul, Turkey, June 2016. *In Conference Proceedings.*
19. **Anderson, B.**, Vance, A., Jenkins, J., Kirwan, B., *Bjornn, D. "It All Blurs Together: How the Effects of Habituation Generalize Across System Notifications and Security Warnings," Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2016. *In Conference Proceedings.*
18. *Bjornn, D., Kirwan, B., **Anderson, B.**, Jenkins, J., Vance, A. "A Longitudinal Investigation of Habituation to Security Warnings: A Parallel fMRI and Eye Tracking Study," *Interdisciplinary Symposium on Decision Neuroscience*, Philadelphia, PA, June 2016.
17. **Anderson, B.**, Vance, A., Jenkins, J., Kirwan, B., "Not Now:" Using fMRI and Eye Tracking to Improve the Timing of Security Messages" *Workshop on Information Security and Privacy (WISP)*, December 2015. *In Conference Proceedings.*

16. Jenkins, J., **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D. “More Harm than Good? How Security Messages that Interrupt Make us Vulnerable,” The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Newark, DE, October 2015. *In Conference Proceedings*.
15. **Anderson, B.**, Vance, A., Kirwan, B., Jenkins, J. and Eargle, D. “Using fMRI to Explain the Effect of Dual-Task Interference on Security Behavior,” Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2015.
14. **Anderson, B.**, Kirwan, B., Jenkins, J., Eargle, D., *Howard, S, Vance, A. “How Polymorphic Warnings Reduce Habituation in the Brain—Insights from an fMRI Study,” Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), Seoul, Korea, 2015. *In Conference Proceedings*. (Considered a Tier 1 publication in Computer Science).
13. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “Users Aren’t (Necessarily) Lazy: Using NeuroIS to Explain Habituation to Security Warnings,” International Conference on Information Systems, Auckland, New Zealand, 2014. *In Conference Proceedings*
12. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., *Howard, S. “Why Users Habituate to Security Warnings: Insights from fMRI,” The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Newcastle, UK, June 2014. *In Conference Proceedings*.
11. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “The Role of the Repetition Suppression Effect in User Disregard of Security Warnings: An fMRI Study,” Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2014. *In Conference Proceedings*.
10. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “Breaking Bad Security Habits: Using fMRI to Design Habituation-resistant Security Warnings,” 4th Annual Interdisciplinary Symposium on Decision Neuroscience, Stanford University, Palo Alto, CA, 2014. *In Conference Proceedings*.
9. **Anderson, B.**, Vance, A., Eargle, D. “Is Your Susceptibility to Phishing Dependent on Your Memory?” Workshop on Information Security & Privacy (WISP), AIS SIGSEC and IFIP TC11.1, Milan, Italy, 2013. *In Conference Proceedings*
8. *White, E.A., Vance, A., **Anderson, B.**, Eargle, D., Kirwan, B. “Electrophysiological responses to gains and losses predict overall risk-taking behavior,” *Society for Neuroscience Abstracts* vol 39, Program No. 664.06, November 2013.
7. **Anderson, B.**, Vance, A., Eargle, D., Kirwan, B. “Your Memory is Working Against You: How Eye Tracking and Memory Explain Susceptibility to Phishing,” The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Niagara, NY, 2013. *In Conference Proceedings*

6. Vance, A., **Anderson, B.**, Kirwan, B., *Eargle, D. “Using Measures of Risk Perception to Predict Information Security Behavior: Insights from Electroencephalography (EEG),” JAIS workshop, Gmunden Retreat on NeuroIS, Gmunden, Austria, 2013. *In Conference Proceedings*
5. **Anderson, B.**, Vance, A., Hansen, J., Kirwan, B., *Eargle, D., *Hinkle, L., *Weagel, A. “Neural Correlates of Gender Differences in Distinguishing Malware Warnings and Legitimate Websites: A NeuroIS Study,” The Dewald Roode Workshop on Information Systems Security Research, IFIP, WG8.11/WG11.13, Provo, UT, 2012. *Conference Proceedings*.
4. Lowry, P.B., *Schuetzler, R., *Richardson, J., *Giboney, J., *Gregory, T., *Romney, J., and **Anderson, B.B.** “The Value of Distrust in Computer-Based Decision-Making Groups,” Hawaii International Conference on System Sciences (HICSS)—Waikoloa, Hawaii, January 2010
3. **Anderson, B.B.** “Determining Factors in the Usage of Software Applications by End Users in a Not-for-Profit Environment,” Sunbelt International Social Network Conference, Vancouver, BC, Canada, April 2006.
2. **Anderson, B.B.**, Hansen, J.V., and Lowry, P.B. “Dependability Auditing with Model Checking” 11th Annual Americas Conference on Information Systems (AMCIS), Omaha, NE, August 11-14, pp. 3147-3156, 2005.
1. Clark, T.H.K., **Anderson, B.B.**, Gappmaier, M. “Successful Organizational Transformation: Revolutionary Change Using Evolutionary Tactics” in *Academy of Management Annual Meeting Proceedings*, New Orleans, 2004.

Invited Publications

2. **Anderson, B.B.**, *Oprya, L., Romney, M. 2005. “Mass Mailings Made Simple” *Journal of Accountancy*, Vol. 199, No. 4, pp. 48-55.
1. Gappmaier, M., **Anderson, B.B.**, Clark, T.H.K. “Revolutionäre Veränderung von Geschäftsprozessen durch evolutionäre Methodik” *Lernende Organisation*, May/June 2002, No. 7, pp. 24-30.

Invited Presentations

41. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” Brigham Young University, Girls Cybersecurity Camp, Boys Cybersecurity Camp, July 2022.

40. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” Brigham Young University, Girls Cybersecurity Camp, Boys Cybersecurity Camp, July 2021.
39. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” University of Utah, CS 4440 Introduction to Computer Security lecture, February 2021.
38. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” Brigham Young University, Cyber Security Research Laboratory lecture, October 2020.
37. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” University of Utah, CS 4440 Introduction to Computer Security lecture, February 2020.
36. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” Brigham Young University, Girls Cybersecurity Camp, July 18, 2019.
35. **Anderson, B.,** Kirwan, B., Eargle, D., Jenkins, J., Vance, A., “Neural Evidence of Generalization of Software Notifications to Security Warnings,” Security and Human Behavior Workshop, Harvard University, June 2019.
34. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” University of Utah, CS 4440 Introduction to Computer Security lecture, February 2019.
33. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” SAINTCON—Utah’s Premier Cybersecurity Conference, Provo, UT September 2018.
32. **Anderson, B.** “Thriving as a Woman in a Male-Dominated Field,” Utah Women in Higher Education Network (UWHEN) Annual Leadership Conference, Salt Lake Community College, SLC, UT, April 2018.
31. **Anderson, B.** “Thriving as a Woman in a Male-Dominated Field,” 2018 Women in Leadership Conference, BYU Marriott School of Business, Provo, UT, March 2018.
30. **Anderson, B.** “Using Neuroscience to Improve the Usability of Information Security,” Cyber Week, Tel Aviv University, Israel, June 2017.
29. **Anderson, B.** “Positive Thinking and Gratitude,” Utah Women in Higher Education Network (UWHEN) Fall Workshop, BYU, Provo, UT, September 2016.
28. Vance, A., **Anderson, B.,** Jenkins, J., Kirwan, B., Bjornn, D., “It All Blurs Together: How the Effects of Habituation Generalize Across System Notifications and Security Warnings,” Lightning Talk, Symposium on Usable Privacy and Security, Denver, June 2016.

27. Jenkins, J., **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., “More Harm than Good? How Security Messages that Interrupt Make Us Vulnerable,” Workshop on Security and Human Behavior, Boston, May 2016.
26. Vance, A., **Anderson, B.**, Jenkins, J., Kirwan, B., Bjornn, D., “It All Blurs Together: How the Effects of Habituation Generalize Across System Notifications and Security Warnings,” Workshop on Security and Human Behavior, Boston, May 2016.
25. **Anderson, B.** “Time Saving Tech Tips,” Faculty Women’s Association Spring Retreat, BYU, Provo, UT, April 2016.
24. **Anderson, B.** and Berzins, M.A., “Time Saving Technology Tips, Multi-Tasking, and the Stories We Tell Ourselves,” Utah Women in Higher Education Network (UWHEN) Spring Conference, University of Utah, Salt Lake City, UT, April 2016.
23. **Anderson, B.** “Cybersecurity and Spiritual Safety,” BYU Devotional Address, <https://speeches.byu.edu/speaker/bonnie-brinton-anderson/> December 8, 2015.
22. **Anderson, B.**, Biros, D., D’Arcy, J., Dhillon, G. Hovav, A., and Phillips, A. “Bright Blue Cybersecurity (BBC) Project - SIGSEC Research Initiative—Panel,” Workshop on Information Security and Privacy (WISP), December 2015
21. Jenkins, J., **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., “More Harm than Good? How Security Messages that Interrupt Make Us Vulnerable,” ISR Digital Vulnerabilities Special Issue Workshop, Boston, MA, September 2015.
20. **Anderson, B.**, Vance, A., Kirwan, B., Jenkins, J. and Eargle, D., “How Technostress Impacts Users’ Responses to Security Warnings: A NeuroIS Study,” Americas Conference on Information Systems (AMCIS), Puerto Rico, August 2015.
19. **Anderson, B.**, Kirwan, B., Eargle, D., Jenkins, J., and Vance, A., “How Polymorphic Warnings Reduce Habituation in the Brain—Insights from an fMRI Study,” Presentation to Apple security team, Sunnyvale, CA, June 2015.
18. **Anderson, B.**, Vance, A., “Using Neuroscience to Improve the Design of Security- and Privacy-related Messages,” Presentation to Google Chrome security team, Mountain View, CA, July 2015.
17. **Anderson, B.**, Vance, A., and Kirwan, B. “How to Conduct an fMRI Study to Examine Usable Privacy and Security,” Symposium On Usable Privacy and Security (SOUPS), Ottawa, Canada, July 2015.
16. **Anderson, B.**, Vance, A., Kirwan, B., Jenkins, J. and Eargle, D “The Threat of the One-track Mind: Using fMRI to Show How Dual-Task Interference in the Brain Affects Users’ Responses to Security Messages,” Workshop on Security and Human Behavior, Washington, DC, June 2015.

15. **Anderson, B.**, Vance, A., Kirwan, B., Jenkins, J. and Eargle, D “Technostressing Out: How Technostress Impacts Users’ Responses to Security Warnings,” Workshop on Security and Human Behavior, Washington, DC, June 2015.
14. **Anderson, B.**, Vance, A., and Kirwan, B., “The Force of Habit: Using fMRI to Explain Users’ Habituation to Security Warnings.” Poster presentation at SaTCPI ’15, National Science Foundation Secure and Trustworthy Cyberspace Principal Investigators’ Meeting, Arlington VA, January 2015.
13. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “Users Aren’t (Necessarily) Lazy: Using NeuroIS to Explain Habituation to Security Warnings,” International Conference on Information Systems, Auckland, New Zealand, 2014.
12. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “How Neuroscience Can Improve Security Warnings: Insights from fMRI,” Symposium On Usable Privacy and Security (SOUPS), Menlo Park, CA, July 2014.
11. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “Why Users Habituate to Security Warnings: Insights from fMRI,” The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Newcastle, UK, June 2014.
10. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “The Role of the Repetition Suppression Effect in User Disregard of Security Warnings: An fMRI Study,” Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2014.
9. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “How Users Perceive and Respond to Security Messages; A NeuroIS Research Agenda,” Workshop on Security and Human Behavior, Cambridge, UK, June 2014.
8. **Anderson, B.**, Vance, A., Kirwan, B., Eargle, D., Howard, S. “Breaking Bad Security Habits: Using fMRI to Design Habituation-resistant Security Warnings,” 4th Annual Interdisciplinary Symposium on Decision Neuroscience, Stanford University, Palo Alto, CA, 2014.
7. Stephenson, S. and **Anderson B.** “Strengthening Your Virtual Influence: Leadership through LinkedIn,” Utah Valley University, Orem, UT, April 2014.
6. **Anderson, B.**, Vance, A., Hansen, J., Kirwan, B., Eargle, D., Hinkle, L., *Weagel, A. “Neural Correlates of Gender Differences in Distinguishing Malware Warnings and Legitimate Websites: A NeuroIS Study,” The Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13, Provo, UT, 2012.
5. Clark, T.H.K., **Anderson, B.B.**, Gappmaier, M. “The Cultured Pearl Model of Successful Organizational Transformation,” Academy of Management Conference, Boston, August 2012.

4. **Anderson, B.** “There’s No One Way to Be a Perfect Mother”, BYU Women’s Conference, April 2010.
3. **Anderson, B.** “Model Checking as a Design Science Methodology Extension for Assuring Electronic Commerce Processes.” Brigham Young University School of Computer Science Graduate Colloquium, Provo, UT, January 2009.
2. **Anderson, B.** “When Being “Busy” Goes beyond Being Anxiously Engaged,” May 2006.
1. **Anderson, B.B.** “Effects of Software Specialization on User Acceptance,” Information Institute/IS OneWorld, International Symposium on Research, Las Vegas, April 2004.

GRANTS

2018 NSF Secure & Trustworthy Cyberspace for proposal entitled, “SaTC: Core: Small: The Blurring of Non-essential Notifications and Critical Security Warnings: Examining the Problem of Generalization in the Brain, with Anthony Vance and Brock Kirwan, Awarded \$151,823, CNS-1814721.

2018 BYU Office of Research and Creative Activities (ORCA) grant for proposal entitled “Neurosecurity: Comprehending Security Messages.” Mentored Pre-IS student Zach Vance for a \$1,500 grant.

2017 ORCA grant for proposal entitled “How Habituation to System Notifications Leads to Disregard of Security Warnings.” Mentored MISM student Nate Munk for a \$1,500 grant.

2016 Google Faculty Research Grant for proposal entitled, "From Interference to Information: Intelligent Timing of Security Messages to Encourage Adherence." Awarded \$34,200 with Anthony Vance and Brock Kirwan. Google Liaison: Elisabeth Morant. (Per Google: roughly 15% acceptance rate)

2016 ORCA grant for proposal entitled “Right Now is the Wrong Time.” Mentored MISM student Brock Johanson for a \$1,500 grant.

2016 NCWIT/Google.org \$3,000 seed money grant for WUT club (advisor). Mentored MISM students Breanna Bowden and Emily Cookson.

2015 Supplement to 2014 NSF Grant, awarded \$58,185.

2015 Google Faculty Research Grant for proposal entitled, "Has Your Warning Turned into Wallpaper? Using Neuroscience to Design Habituation-Resistant Security Messages." Awarded \$35,503 with Anthony Vance and Brock Kirwan. Google Liaison: Adrienne Porter Felt. (Per Google: roughly 15% acceptance rate)

2014 NSF Secure & Trustworthy Cyberspace for proposal entitled, “The Force of Habit: Using fMRI to Explain Users’ Habituation to Security Warnings.” Awarded \$294,341 with Anthony Vance and Brock Kirwan.

2014 BYU Mentoring Environment Grant for proposal entitled “Your Memory is Working against You: Using fMRI to Explain How Memory Affects Susceptibility to Phishing.” Awarded \$19,527 to fund mentored research with MISM graduate students with Anthony Vance and Brock Kirwan.

2014 ORCA grant for proposal entitled “Look Sharp! How Eye Tracking and Memory Explain Susceptibility to Phishing.” Mentored BSIS students Ian Jones, Thomas Kelly, and Jeff Penovich for a \$1,500 grant.

2013 Rollins Center for Entrepreneurship and Technology grant “Functional MRI Phishing Study”, ET-13503, with Anthony Vance, \$5,000.

TEACHING

Brigham Young University:

IS401—Systems Analysis

Fall 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2012, Fall 2011

IS551 (MBA512 2008-2010)—Leading Change in a Technical Environment

Fall 2019, Fall 2018, Fall 2017, Fall 2016, Fall 2015, Fall 2013, Fall 2012, Fall 2011, Fall 2010, Fall 2009, Fall 2008, Fall 2007, Fall 2006, Fall 2005, Fall 2004

MBA 593R—Executive Lecture Series

Fall 2009

IS201—Introduction to Management Information Systems

Winter 2011, Winter 2010, Winter 2009, Fall 2007, Spring 2007, Winter 2007, Fall 2006, Fall 2005, Fall 2004, Spring 2004, Fall 2003, Fall 2002, Spring 2002, Winter 2002

IS693R—Readings and Conference (faculty advisor)

Winter 2020—Karli Hirschi, Winter 2019—Jonathon Stone, Spring 2016—David Hinckley, Fall 2015—Drew Brown, Summer 2009—Samuel Griffiths, Spring 2005—Mirella K. Petersen, Winter 2004—Larysa V. Oprya

IS693R—MISM Executive Lecture Series

Fall 2010

EMBA 693R—Human Computer Interaction and User Experience Design

Winter 2023, Winter 2022, Winter 2021, Winter 2019, Winter 2018

Additional Teaching Experience:

Carnegie Mellon University—Intermediate Database Management, Spring 2001, Fall 2000

Duquesne University—Health Care Systems Analysis and Design, Fall 2000

Carrig Emerging Technology, 1999, Application Development Using Visual Basic V6.

UNIVERSITY CITIZENSHIP

Associate Dean of Faculty and Research, BYU Marriott School of Business 2020-present
University Faculty Development Council 2020-present
University Research Council 2020-present
University Information Security and Privacy Committee 2021-present
Director, Foreign Business Excursion, India and Middle East 2019-present
Information Systems Department Chair 2017-2020
Department Chair Coordinating Council 2017-2020
Assistant Director, Foreign Business Excursion, India and Middle East 2018-2019
Women's Association for Information Systems (WAIS) Advisor 2011-2021
Sharing University Data Workgroup 2020
Marriott School Marketing and Behavioral Lab Steering Committee 2013-2020
Utah Women in Higher Education Network (UWHEN) Executive Committee 2010-2020
UWHEN Webmaster 2011-2020
ISD Curriculum Committee 2002-2003, 2006-2020
Marriott School Dean Search Committee 2007-2008, 2012-2013, 2017-2018
MISM Graduate Director 2008-2017
Women in Technology Advisor 2015-2018
UWHEN Communications Committee Chair 2011-2016
Information Systems Student Advisory Council Advisor 2011-2015
Faculty Advisory Council Co-chair 2011-2013
Faculty Advisory Council 2010-2013
Technology in the Classroom University Committee 2012-2013
Marriott School Diversity Committee 2004-2011
ISD Promotion and Continuing Status (PCS) Committee 2009-2012
ISD Promotion and Continuing Status (PCS) Committee Chair 2011-2012
IS201 Committee 2001-2011
Faculty Women's Association Past-President 2009-2010
Faculty Women's Association President 2008-2009
Faculty Women's Association President-Elect 2007-2008
BYU Women's Conference Committee 2005-2007
ISys201 Committee Chair 2006-2008
ISD Newsletter Editor 2005-2008
ISys Student Recruiting Committee 2004-2009
William G. Dyer Institute for Leading Organizational Change 2003-2007
Faculty Women's Association Treasurer 2004-2006
SOAIS Newsletter Committee 2003-2005
ISys Faculty Recruiting Committee 2002-2005
Faculty Women's Association Leadership Committee Chair 2002-2004
240 TNRB Computer Lab Scheduling Coordinator 2002-2003
PhD Student Representative for PhD Committee, Carnegie Mellon University 1999-2000

PROFESSIONAL CITIZENSHIP

Honorary Co-Chair Americas Conference on Information Systems (AMCIS) 2024, Salt Lake City, UT with Jason Thatcher 2022-present

Program Committee Member, Gmunden Retreat on NeuroIS 2015-present
Co-Chair AMCIS 2020, Salt Lake City, UT with and Jason Thatcher 2016-2020
Chair, AMCIS Conference Chairs Advisory Committee 2019-2021
Chair, IFIP SEC 2019 WIPER (Work in Progress, Emerging Research) Track, 2018-2019
Associate Editor, ECIS 2019 “Designing Human-Computer Interaction” Track
Associate Editor, ICIS 2017 “Information Privacy and Security” Track
Chair, Workshop on Information Security and Privacy, AIS SIGSEC and IFIP TC11.1, 2016,
Dublin, Ireland.
Program Continuity Chair, Dewald Roode Workshop on Information Systems Security Research,
IFIP Working Group 8.11/11.13, 2016, Albuquerque, NM.
Program Chair, Dewald Roode Workshop on Information Systems Security Research, IFIP
Working Group 8.11/11.13, 2015, Newark, DE.
Associate Editor, ICIS 2015 “Exploring the Information Frontier” Track
Associate Editor, ECIS 2015 “Human-Centered Information Systems” Track
Chair, Workshop on Information Security and Privacy, AIS SIGSEC and IFIP TC11.1, 2015, Fort
Worth, TX.
Advisory Board *Journal of Cybersecurity* 2015-present
Editorial Board *Journal of Cybersecurity Education, Research, and Practice (JCERP)* 2016-
present
Editorial Board *Mensa Research Journal* 2006-present
Reviewer *Journal of the Association for Information Systems* 2013-present
Reviewer *MIS Quarterly* 2013-present
Reviewer *Information Systems Research* 2006-present
Reviewer *Mensa Research Journal* 2009-present
Reviewer AIS Transactions on Replication Research 2017-present
Reviewer International Conference on Information Systems (ICIS) 2009-present
Reviewer European Conference on Information Systems (ECIS) 2014-present
Reviewer Americas Conference on Information Systems (AMCIS) 2009-present
Reviewer Hawaii International Conference on System Sciences (HICSS) 2014-present
Reviewer Dewald Roode Workshop on Information Systems Security Research, 2013-present
Reviewer IEEE SMC-A 2009-2017
Reviewer Academy of Management OCIS division 2004-2009
Reviewer Academy of Management TIM division 2004-2009
Reviewer *Organization Science* 2004-2006

AWARDS

IB and Eleanor Romney Distinguished Professorship, 2021-present
Douglas & Effie Driggs Distinguished Professorship, 2020-2021
AIS Distinguished Member Award, December 2021
J. Owen Cherrington Faculty Service Award, April 2021
Douglas & Effie Driggs Professorship, 2017-2020
AIS Technology Vision Award, December 2020
Utah Women in Higher Education Network (UWHEN) Special Recognition Award, April 2019
Faculty Women’s Association Scholarship Award, April 2018
Marriott School Scholarly Excellence Award, April 2018

Information Systems Research Best Published Paper Award, 2016
Marriott School Citizenship Award, April 2015
Faculty Women's Association Citizenship Award, April 2012
LeAnn Albrecht Fellow, 2006-2017

ASSOCIATIONS

Academy of Management
American Mensa, Ltd.
Association of Information Systems (AIS)—Distinguished Member (December 2021)
Association for Computing Machinery (ACM)
Faculty Women's Association—BYU
IFIP Working Group 8.11/11.13, "Information Systems Security Research"
Institute for Operations Research and the Management Sciences (INFORMS)
Society for Information Management (SIM)
Triple Nine Society
USENIX: The Advanced Computing Systems Association
Utah Women in Higher Education Network (UWHEN)

PROFESSIONAL DEVELOPMENT ACTIVITIES

International Conference on Information Systems (ICIS)—Copenhagen, Denmark, December 2022.
European Conference on Information Systems (ECIS)—Timisoara, Romania, June 2022
Retreat on NeuroIS—Vienna, Austria, June 2022.
ICIS—Austin, TX, December 2021.
Americas Conference in Information Systems (AMCIS) virtual—Montreal, Canada, August 2021.
ECIS virtual—Marrakesh, Morocco, June 2021.
ICIS virtual—Hyderabad, India, December 2020.
AMCIS virtual—Salt Lake City, UT, August 2020.
ECIS virtual—Marrakesh, Morocco, June 2020.
ICIS—Munich, Germany, December 2019.
AMCIS—Cancun, Mexico, August 2019.
ECIS—Stockholm, Sweden, June 2019.
Workshop on Security and Human Behavior, Cambridge, MA, June 2019.
ICIS—San Francisco, CA, December 2018.
AMCIS—New Orleans, LA, August 2018.
ACM Conference on Human Factors in Computing Systems (CHI), Montréal, Canada, May 2018.
ICIS—Seoul, South Korea, December 2017.
Cyber Week, Tel Aviv, Israel, June 2017.
CHI, Denver, CO, May 2017.
USENIX Enigma 2017 Conference, Oakland, CA, January 2017.
Faculty Development in International Business (FDIB CIBER)—Myanmar and Cambodia, January 2017.
Hawaii International Conference on System Sciences (HICSS)—Waikoloa, Hawaii, January 2017, Mini-track Substitute Chair (three sessions).

Workshop on Information Security and Privacy (WISP)—Dublin, Ireland, December 2016.
ICIS— Dublin, Ireland, December 2016.
Dewald Roode Workshop on Information Systems Security Research, IFIP WG8.11/WG11.13,
Albuquerque, NM, October 2016.
AMCIS—San Diego, CA August 2016.
Symposium on Usable Privacy and Security (SOUPS)—Denver, CO, June 2016.
ECIS—Istanbul, Turkey, June 2016.
Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2016.
Workshop on Security and Human Behavior, Harvard, Boston, MA, June 2016.
FDIB CIBER MENA—UAE and Egypt, January 2016.
WISP—Ft. Worth, TX, December 2015.
ICIS— Ft. Worth, TX, December 2015.
Dewald Roode Workshop, IFIP WG8.11/WG11.13, Newark, DE, October 2015.
Workshop on Security and Human Behavior, Georgetown, Washington, DC, June 2015.
FDIB CIBER South Africa—South Africa, Zambia, Namibia, Botswana, Zimbabwe, May 2015.
ACM Conference on Human Factors in Computing Systems (CHI), Seoul, Korea, 2015.
NSF Secure and Trustworthy Cyberspace PI Meeting, Washington, D.C., January 2015.
ICIS—Auckland, New Zealand, December 2014.
Dewald Roode Workshop, IFIP WG8.11/WG11.13, Newcastle, UK, June 2014.
Gmunden Retreat on NeuroIS, Gmunden, Austria, June 2014.
Workshop on Security and Human Behavior, Cambridge, UK, June 2014.
ICIS—Milan, December 2013.
WISP—Milan, December 2013.
Dewald Roode Workshop, IFIP Working Group 8.11/11.13, 2013, Niagara, NY, October 2013.
Gmunden Retreat on NeuroIS, and Journal of the Association for Information Systems Special
Issue Workshop, Gmunden, Austria, June 2013.
NSF Secure and Trustworthy Cyberspace PI Meeting, Washington, D.C., November 2012
The Academy of Management (AOM) Conference—Boston, August 2012.
ICIS—Shanghai, December 2011.
AMCIS—San Francisco, August 2009, including Pre-AMCIS MISQe authors workshop.
ICIS—Paris, December 2008.
HICSS—Waikoloa, Hawaii, January 2007.
AOM—Atlanta, August 2006.
Sunbelt International Social Network Conference—Vancouver, BC, Canada, April 2006
ICIS—Las Vegas, December 2005.
AMCIS—Omaha, Nebraska, August 2005.
ICIS—Washington, DC, December 2004.
AOM—New Orleans, August 2004—Including Junior Faculty Consortium.
International Symposium on Research Methods (ISRM) at the ISOneWorld Conference—Las
Vegas, April 2004.
ICIS—Seattle, December 2003—Including Junior Faculty Consortium.
AOM—Denver, August 2002.
AMCIS—Dallas, August 2002—Including Junior Faculty “MIS Camp”.

RELATED PROFESSIONAL EXPERIENCE

Brigham Young University, Professor, August 2017 – Present
Brigham Young University, Associate Professor, August 2007 – August 2017
Brigham Young University, Assistant Professor, August 2001 – August 2007
Carnegie Mellon University, Adjunct Professor, August 2000 – May 2001
Duquesne University, Adjunct Professor, August 2000 – December 2000
Carnegie Mellon University, Teaching Assistant, January 1998 – August 2000
Carrig Emerging Technology, Instructor, October 1999
Andersen Consulting (now Accenture), Consultant, August 1995 – July 1997
Clients include DHL, Inc., The Gap, State of California Franchise Tax Board, United States Air Force.