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## EDUCATION

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### Degrees

Doctor of Philosophy <i>Iowa State University</i> Major: <b>Business and Technology</b> Specialization: <b>Information Systems</b> Dissertation: <i>A Three-Part Intersection of Psychology and Information Systems</i>	2014
Doctor of Philosophy <i>Iowa State University</i> Major: <b>Computer Engineering</b> Major: <b>Human Computer Interaction</b> Minor: <b>Computer Science</b> Dissertation: <i>Exploring Utilization of Visualization for Computer and Network Security</i>	2009
Master of Science <i>Iowa State University</i> Major: <b>Psychology</b>	2012
Master of Business Administration <i>Iowa State University</i> Major: <b>Business Administration</b> Specialization: <b>Information Systems</b>	2010
Master of Science <i>Iowa State University</i> Major: <b>Information Assurance</b> Major: <b>Computer Engineering</b> Thesis: <i>Roaming User-Based Distributed Firewalls</i>	2005
Bachelor of Arts <i>Simpson College</i> Major: <b>Computer Science</b>	2002

### Certificates

<i>Iowa State University</i> Area: <b>Quantitative Psychology</b>	2011
<i>Iowa State University</i> Area: <b>Graduate Student Teaching Certificate</b>	2011
<i>Iowa State University</i> Area: <b>Preparing Future Faculty Scholar</b> Area: <b>Preparing Future Faculty Fellow</b> Area: <b>Preparing Future Faculty Associate</b>	2006

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## ACADEMIC EXPERIENCE

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<b>William S. Spears Professorship in Business</b>	2021 – present
<b>Associate Professor of Management Science and Information Systems</b>	2019 – present
<b>William S. Spears Fellow in Business</b>	2019 – 2021
<b>Assistant Professor of Management Science and Information Systems</b>	2013 – 2019
<i>Oklahoma State University, Spears School of Business</i>	
<b>Lecturer</b>	2013
<i>Iowa State University, College of Engineering</i>	
<b>Lecturer</b>	2011 – 2012
<i>Iowa State University, College of Business</i>	
<b>Graduate Research Assistant</b>	2009 – 2013
<i>Iowa State University, College of Business</i>	

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## RESEARCH

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### Research Interests

Advanced Quantitative Analysis      Computer and Network Security      Behavioral IS

### Refereed Journal Articles

- Luse, A., Burkman, J., Stewart, E. (forthcoming) “The Impact of Self-Perceived Facial Attractiveness on Webcam Use During Virtual Meetings,” *Journal of Computer Information Systems*, Volume , Issue , pp. .
- Luse, A., Shadbad, F. (2023) “Hackalytics: Using Computer Hacking to Engage Students in Analytics,” *Journal of Information Systems Education*, Volume 34, Issue 4, pp. .
- Luse, A., Townsend, A., Mennecke, B. (2022) “Does Technology Thwart Gender Stereotypes: An Impression Formation-based Examination of the Differential Influence of Technology across Gender and Message,” *Journal of the Association for Information Systems*, Volume 23, Issue 6, pp. .
- Luse, A. Burkman, J. (2022) “[Learned Helplessness Attributional Scale \(LHAS\): Development and Validation of an Attributional Style Measure](#),” *Journal of Business Research*, Volume 151, pp. 623-634.
- Baswani, S., Townsend, A., Luse, A. (2021) “[Company-Sponsored Online Co-Creation and Financial Incentives: The Impact of Intrinsic Motivation on Participation Intention](#),” *International Journal of Electronic Commerce*, Volume 25, Issue 4, pp. 394-415.
- Luse, A., Rursch, J. (2021) “[Using a Virtual Lab Network Testbed to Facilitate Real-World Hands-on Learning in a Networking Course](#),” *British Journal of Educational Technology*, Volume 52, Issue 3, pp. 1244-1261.
- Luse, A., Brown, A., Rursch, J. (2021) “[Instruction in 802.11 Technology in Online Virtual Labs](#),” *IEEE Transactions on Education*, Volume 64, Issue 1, pp. 12-17.
- Luse, A., Burkman, J. (2021) “[Gophish: Implementing a Real-World Phishing Exercise to Teach Social Engineering](#),” *Journal of Cybersecurity Education, Research & Practice*, Volume 2020, Issue 2, Article 5.
- Luse, A., Burkman, J., Steelman, S. (2020) “[This Isn’t Your Parent’s TV Show...Oh Wait, It Is](#),” *Drake Management Review*, Volume 10, Issue 1, pp. 1-11.
- Kalgotra, P., Sharda, R., Luse, A. (2020) “[Which Similarity Measure to Use in Network Analysis: Impact of Sample Size on Phi Correlation Coefficient and Ochiai Coefficient based Networks](#),” *International Journal of Information Management*, Volume 55, pp. 1-10.

- Luse, A., Burkman, J. (2020) "[Wearables in the Workplace: Examination Using a Privacy Boundary Model](#)," *Journal of the Midwest Association for Information Systems*, Volume 2020, Issue 2, pp. 7-15.
- Davazdahemami, B., Hammer, B., Kalgotra, P., Luse, A. (2020) "[From General to Situational Privacy Concerns: A New Mechanism to Explain Information Disclosure in Social Networks](#)," *Communications of the Association for Information Systems*, Volume 47, pp. 652-677.
- Liang, N., Biros, D., Glancy, F., Luse, A. (2020) "[Classification of Malicious Insiders and the Association of the Forms of Attacks](#)," *Journal of Criminal Psychology*, Volume 10, Issue 3, pp. 233-247.
- Luse, A., Townsend, A.M., Mennecke, B. (2018) "[The Blocking Effect of Preconceived Bias](#)," *Decision Support Systems*, Volume 108, pp. 25-33.
- Davazdahemami, B., Luse, A., Scheibe, K., Townsend, A.M. (2018) "[Training, Self-Efficacy, and Performance: a Replication Study](#)," *AIS Transactions on Replication Research*, Volume 4, Issue 1, pp. 1-18.
- Luse, A., Al Marzooq, A., Burkman, J. (2018) "[Windows Me: Using Antiquated Software to Learn about Security](#)," *IEEE Potentials*, Volume 37, Issue 2, pp. 10-12.
- Luse, A., Burkman, J. (2018) "[Safely Using Real-World Data for Teaching Statistics: A Comparison of Student Performance and Perceived Realism between Dataset Types](#)," *Journal of the Midwest Association for Information Systems*, Volume 2018, Issue 1, pp. 11-22.
- Luse, A., Hammer, B. (2017) "[High School Introductory Programming on Raspberry Pi Made From Scratch](#)," *International Journal of People-Oriented Programming*, Volume 6, Issue 2, pp. 33-45.
- Wang, D., Luse, A., Burkman, J. (2016) "[Dynamic visualization of time-based changes to data generated by Reddit.com: The Real Time Conversation Project](#)," *American Journal of Undergraduate Research*, Volume 13, Issue 4, pp. 59-68.
- Liang, N., Biros, D., Luse, A. (2016) "[An Empirical Validation of Malicious Insider Characteristics](#)," *Journal of Management Information Systems*, Volume 33, Issue 2, pp. 361-392.
- Laux, D., Luse, A., Mennecke, B. (2016) "[Collaboration, Connectedness, and Community: An examination of the factors Influencing Student Persistence in Virtual Communities](#)," *Computers in Human Behavior*, Volume 57, pp. 452-464.
- Luse, A. (2015) "[Estimating Random Effects in Multilevel Structural Equation Models Using Mplus](#)," *Journal of the Midwest Association for Information Systems*, Volume 2015, Issue 2, pp. 31-52.
- Carlson, P., Peters, A., Gilbert, S.B., Vance, J.M., Luse, A. (2015) "[Virtual Training: Learning Transfer of Assembly Tasks](#)," *IEEE Transactions on Visualization and Computer Graphics*, Volume 21, Issue 6, pp. 770-782. (<https://youtu.be/aAxBykcL32M>)
- Wang, Y., Townsend, A., Mennecke, B., Luse, A. (2014) "[Understanding the Moderating Roles of Types of Recommender Systems and Products on Customer Behavioral Intention to Use Recommender Systems](#)," *Information Systems and e-Business Management*, pp. 1-31.
- Luse, A., Rursch, J., Jacobson, D. (2014) "[Utilizing Structural Equation Modeling and Social Cognitive Career Theory to Identify Factors in Choice of IT as a Major](#)," *ACM Transactions on Computing Education*, Volume 14, Issue 3, pp. 1-19.
- Schiller, S., Mennecke, B., Nah, F., Luse, A. (2014) "[Institutional Boundaries and Trust of Virtual Teams in Collaborative Design: An Experimental Study in a Virtual World Environment](#)," *Computers in Human Behavior*, Volume 35, pp. 565-577.
- Luse, A., Mennecke, B. (2014) "[IT Can Matter: Co-Evolution Fostering IT Competitive Advantage](#)," *Management Research Review*, Volume 37, Issue 6, pp. 574-588.
- Luse, A., Mennecke, B., Townsend, A.M., Jacobson, D. (2014) "[Employing Interactive Maps to Increase User Utilization of Visualization Mechanisms for Network Security Management](#)," *Journal of Information Systems Security*, Volume 8, Issue 3, pp. 61-85.

- Luse, A., McElroy, J.C., Townsend, A.M., DeMarie, S. (2013) “[Personality and Cognitive Style as Predictors of Preference for Working in Virtual Teams](#),” *Computers in Human Behavior*, Volume 29, Issue 4, pp. 1825-1832.
- Luse, A., Mennecke, B., Triplett, J. (2013) “[The Changing Nature of User Attitudes Toward Virtual World Technology: A Longitudinal Study](#),” *Computers in Human Behavior*, Volume 29, Issue 3, pp. 1122-1132.
- Luse, A., Mennecke, B., Townsend, A.M. (2012) “[Selecting a Research Topic: A Framework for Doctoral Students](#),” *International Journal of Doctoral Studies*, Volume 7, pp. 143-153.
- Luse, A., Mennecke, B., Triplett, J., Karstens, N., Jacobson, D. (2011) “[A Design Methodology and Implementation for Corporate Network Security Visualization: A Modular-Based Approach](#),” *AIS Transactions on Human-Computer Interaction*, Volume 3, Issue 2, pp. 104-132. Accepted by editors Alan Hevner and Ping Zhang.
- Laux, D., Luse, A., Mennecke, B., Townsend, A.M. (2011). “[Adoption of Biometric Authentication Systems: Implications for Research and Practice in the Deployment of End-User Security Systems](#),” *Journal of Organizational Computing and Electronic Commerce*, Volume 21, Issue 3, pp. 221-245.
- Luse, A., Mennecke, B., Townsend, A.M. (2010). “[User Acceptance of Speech-Enabled Technologies for Configuration of Computer and Network Security](#),” *Journal of Information Privacy and Security*, Volume 6, Issue 4, pp. 28-49.
- Luse, A., Mennecke, B., Townsend, A.M. (2010). “[Improving Direction-Giving Through Utilization of an RFID-Enabled Kiosk](#),” *International Journal of Advanced Pervasive and Ubiquitous Computing*, Volume 2, Issue 2, pp. 45-56.
- Rursch, J., Luse, A., Jacobson, D. (2010). “[IT-Adventures -- A Program to Spark IT Interest in High School Students using Inquiry-Based Learning with Robotics, Game Design, and Cyber Defense](#),” *IEEE Transactions on Education*, Volume 53, Issue 1, pp. 71-79.
- Luse, A., Mennecke, B., Townsend, A.M. (2009). “[Electronic Forms-based Computing for Evidentiary Analysis](#),” *Journal of Digital Forensics, Security, and Law*, Volume 4, Issue 3, pp. 17-34.
- Luse, A., Scheibe, K.P., Townsend, A.M. (2009). “[Addressing Internal Security Threats with Roaming User-Based Distributed Firewalls](#),” *Journal of Information Systems Security*, Volume 5, Issue 2, pp. 26-41.
- Luse, A., Townsend, A.M., Scheibe, K.P. (2008). “[Software Implementation using Hardware-Based Verification for Secure Content Delivery](#),” *Journal of Information Warfare*, Volume 7, Issue 2, pp. 11-23.
- Luse, A., Scheibe, K.P., Townsend, A.M. (2008). “[A Component-Based Framework for Visualization of Intrusion Detection Events](#),” *Information Security Journal*, Volume 17, Issue 2, pp. 95-107.
- Scheibe, K.P., Mennecke, B., Luse, A. (2007). “[The Role of Effective Modeling in the Development of Self-efficacy: The Case of the Transparent Engine](#),” *Decision Sciences Journal of Innovative Education*, Volume 5, Issue 1, pp. 21-42.

### Refereed Book Chapters

- Luse, A., Townsend, A.M., Scheibe, K.P. (2008). “Firewalls: Continuing Solutions for Network Security,” [Handbook of Research on Information Security and Assurance](#).

### Refereed Conference Publications

- Shadbad, F., Bahr, G., Luse, A., Hammer, B., “Best of Both Worlds: The Inclusion of Gamified Elements in Virtual Lab Environments to Increase Educational Value”, Hawaii International Conference on System Sciences (HICSS-56), Maui, HI, January 3-6, 2023.
- Weiser, M., Luse, A., “Coming Back: Risk Perceptions in the Wake of COVID,” Phi Beta Delta 36th Annual International Conference 2022.
- Krieger, C., Luse, A., “[Utilizing a Virtual Internet Testbed and Private Cloud to Teach Organizational Cloud Integration](#),” 17<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2022).

- Luse, A., Sims, W., Burkman, J., “[Who Turned the Lights Out? Using Home Automation to Teach IoT,](#)” International Conference on Information Systems Education and Research (SIG-ED 2021).
- Luse, A., Steelman, S., “[This Isn’t Your Parent’s TV Show...Oh Wait, It Is,](#)” 15<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2020). (<https://www.youtube.com/watch?v=MFEAGJfMDxs>)
- Luse, A., Rursch, J., “[The Group Level Contextual Support of IT Self-Efficacy on Individual's Choice to Major in IT: A Multilevel Examination of the Rising Tide Raises All Boats Axiom,](#)” 2019 IEEE Frontiers in Education Conference (FIE), Cincinnati, OH, October 16-19, 2019.
- Davazdahemami, B., Hammer, B., Luse, A., Kalgotra, P., “[The Role of Parallelism in Resolving the Privacy Paradox of Information Disclosure in Social Networks,](#)” International Conference on Information Systems (ICIS 2018), San Francisco, CA, December 13-16, 2018.
- Rursch, J., Pfister, P., Luse, A., Tran, T., “[The Constantly Evolving Freshman Engineering Course: The Case of the DualShock4 Game Controller to Increase Engagement with Laboratory Exercises for an Introductory Problem Solving Course,](#)” 2018 IEEE Frontiers in Education Conference (FIE), San Jose, CA, October 3-6, 2018.
- Luse, A., Burkman, J., “[An Evaluation of Scales Used for Measuring Attribution,](#)” 12<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2017), Springfield, IL, May 18-19, 2017.
- Kalgotra, P., Luse, A., Sharda, R., “[Take Control of Interruptions in Your Life: Lessons from Routine Activity Theory of Criminology,](#)” Hawaii International Conference on System Sciences (HICSS-50), Honolulu, HI, January 4-7, 2017.
- Biros, D., Liang, N., Luse, A., “[Taxonomy of Malicious Insiders: A Proof of Concept Study,](#)” The Twenty-Second Americas Conference on Information Systems (AMCIS 2016), San Diego, CA, August 11-13, 2016.
- Luse, A., Rursch, J., Jacobson, D., “[When Size Does Matter: Identifying Multilevel Factors Contributing to IT Major Choice,](#)” 11<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2016), Milwaukee, WI, May 19-20, 2016.
- Luse, A., “[Estimating Random Effects in Multilevel Structural Equations Models,](#)” 9<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2014), Ames, IA, May 15-16, 2014.
- Luse, A., Mennecke, B., Townsend, A.M., DeMarie, S., “[Strategic Information Systems Security: Definition and Theoretical Model,](#)” The Nineteenth Americas Conference on Information Systems (AMCIS 2013), Chicago, IL, August 15-17, 2013.
- Luse, A., Mennecke, B., Townsend, A.M., “[Experience Richness: Effects of Training Method on Individual Technology Acceptance,](#)” Hawaii International Conference on System Sciences (HICSS-46), Grand Wailea, Maui, HI, January 7-10, 2013.
- Wang, Y.Y., Townsend, A.M., Luse, A., Mennecke, B., “[The Determinants of Acceptance of Recommender Systems: Applying the UTAUT Model,](#)” 18<sup>th</sup> Americas Conference on Information Systems (AMCIS 2012), Seattle, WA, August 9-11, 2012.
- Rursch, J., Luse, A., Jacobson, D., “[Using Content Analysis to Evaluate Student Inquiry-Based Learning: The Case of High School Students Preparing for a Cyber Defense Competition,](#)” 2012 Annual Meeting of the American Society for Engineering Education, San Antonio, TX, June 10-13, 2012.
- Townsend, A.M., Triplett, J., Mennecke, B., Luse, A., “[Object and Symbol in Technology Adoption,](#)” International Conference on Information Systems (ICIS 2010), St. Louis, MO, December 12-15, 2010.
- Vidrio-Baron, S., Luse, A., “[Development of a culturally-oriented website usability evaluation,](#)” 15<sup>th</sup> Americas Conference on Information Systems (AMCIS 2009), San Francisco, CA, August 6-9, 2009.
- Luse, A., Triplett, J., “[Utilizing Visualization Mechanisms to Improve User Performance during Cyber Defense Competitions,](#)” 4<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2009), Madison, SD, May 22-23, 2009.

- Triplett, J., Laux, D., Luse, A., Tao, L.E., “[Customer Acceptance of Biometric Technology](#),” 4<sup>th</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2009), Madison, SD, May 22-23, 2009.
- Luse, A., Vidrio-Baron, S., Mennecke, B., Townsend, A.M., “[A Location-based Approach for Distributed Kiosk Design](#),” 14<sup>th</sup> Americas Conference on Information Systems (AMCIS 2008), Toronto, ON, Canada, August 14-17, 2008.
- Meléndez, J.C., Luse, A., Townsend, A.M., Mennecke, B., “[Convergence of Physical and Logical Security: A Pre-implementation Checklist](#),” 3<sup>rd</sup> Annual Midwest Association for Information Systems Conference (MWAIS 2008), Eau Claire, WI, May 23-24, 2008.
- Luse, A., Townsend, A.M., “[Improving Direction-Giving Through Utilization of an RFID-Enabled Kiosk](#),” 2008 IEEE International Conference on Electro/Information Technology (EIT 2008), Ames, IA, May 18-21, 2008.
- Jordan, Z., Marsh, E., Luse, A., Tao, L.E., “[GuardDV: A Proximity Detection Device for Homeless Survivors of Domestic Violence](#),” 26<sup>th</sup> Annual Computer Human Interaction Conference (CHI 2008), Florence, Italy, April 5-10, 2008.

### Other Publications

- Carlson, P., Peters, A., Gilbert, S.B., Vance, J.M., Luse, A. (2015) “Virtual Training: Learning Transfer of Assembly Tasks,” IEEE Virtual Reality (VR 2015), Arles, France, March 23-27, 2015. (*invited paper*)
- Townsend, A.M., Luse, A. (2008). “[Firewalls and Intrusion Prevention Systems](#),” *Inside Supply Management*, Volume 19, Issue 4.

### Papers Under Review

- Luse, A., Townsend, A.M., Edwards, B., “Strong vs. Weak Theory: An Evaluative Mechanism for Theoretical Development,” Submitted to *JIT*, October 2022.
- Krieger, C., Luse, A., Baham, C., Sims, W., “Who Turned the Lights Out? Using Home Automation to Teach IoT,” Revise and resubmit with *CAIS*, October 2022.
- Bahr, G., Luse, A., Hammer, B., “ICT4D and the Capability Approach: Understanding How Conversion Factors Affect Opportunity and Process Freedoms at the Country-Level,” Second round review with *Information Technology for Development*, September 2022.
- Schiller, S., Nah, F., Luse, A., Siau, K., “Men Are from Mars and Women Are from Venus: Dyadic Collaboration in the Metaverse,” Submitted to *Internet Research*, August 2022.
- Hammer, B., Luse, A., Krieger, C., Bahr, G., Shadbad, F., “Understanding Individual Social Exclusion: Conceptualization, Scale Development, and Validation,” Submitted to *Journal of Business Research*, August 2022.

### Research in Progress

- Vidrio-Baron, S., Luse, A., Townsend, A.M., “Mom and Pop versus Multinational: Impact of Multiculturalism and National Identity on Website Usage in Mexico,” Target: *JIBS*.
- Krieger, C., Luse, A., “Utilizing a Virtual Internet Testbed and Private Cloud to Teach Organizational Cloud Integration,” Target: *JISE*.
- Luse, A., Shadbad, F., Wang, Q., “Perception from Afar: Measurement Issues in Information Systems Research,” *ISR*.
- Baham, C., Gerow, J., Bradley, R., Luse, A., “Entrepreneurial Organizational Culture, IT-business Alignment, and Firm Agility: A Moderated Mediation,” Target: *JIT*.
- Cunningham, L., Luse, A., Hammer, B., “The Reality of Misdiagnosing Joint Hypermobility Syndrome for Licensed Clinicians and Student Learners: A Mixed-Methods Approach,” Target: .

- Hammer, B., Luse, A., Davis, F., “Anchoring and Adjustment of Approach-Avoidance on Information Sensitivity and Information Disclosure: A Longitudinal Experiment using EEG,” Target: *ISJ*.
- Hammer, B., Luse, A., Davis, F., “Information Sharing as a Multidimensional, Dyadic Problem: A Multilevel Study of Multiplex Relationships, Privacy, and Trust,” Target: .
- Liang, N., Biros, D., Luse, A., “An Empirical Comparison of Malicious Insiders and Benign Insiders,” Target: *JCERP*.

## Grants and Funded Project Participation

Oklahoma State Department of Health August 2020 – August 2021  
Analytics/Data Science Decision Support for Management of Oklahoma COVID pandemic

\$115,000

*Oklahoma State University – Department of Management Science and Information Systems, Stillwater, OK*

- **Co-PI** on grant to develop analytic models to aid the state of Oklahoma in COVID analysis.

NSA

March 2017 – May 2018

\$289,000

*Iowa State University – Department of Computer Engineering, Ames, IA*

*Oklahoma State University – Department of Management Science and Information Systems, Stillwater, OK*

- **Co-PI** on grant to develop learning modules for computer security using the ISEAGE Internet testbed.

John Deere

August 2012 – January 2013

*Iowa State University – Department of Industrial Engineering, Ames, IA*

- Aided in statistical analysis of user tests evaluating a new smart harvest technology using simulators.

Boeing

October 2012 – April 2013

*Iowa State University – Department of Industrial Engineering, Ames, IA*

- Aided in statistical analysis of user tests evaluating fighter pilot experience in a virtual reality environment.

Cyber Defense Competitions (CDCs)

September, 2005 – May 2012

*Iowa State University – Department of Electrical and Computer Engineering, Ames, IA*

- Competitions involve groups of students defending their computer networks against a team of attackers.
- Aided in the development of a visualization system for use during the CDCs.
- Provided administrative aid to students during the competition.
- Conducted research utilizing students in the competition.

Development of a Recruiting, Selection, and Retention System to

May, 2007 – November, 2008

Enhance Crime Lab Ability to Identify and Hire Appropriate Lab Personnel

Grant funded by *National Institute of Justice in association with the Midwest Forensic Resource Center*

- Analyzed current trends in recruitment of college students by forensic crime labs.

Developing a Customer Satisfaction Survey for Forensic Laboratories. August, 2007 – May, 2007  
Grant funded by *Community Oriented Policing Services Program (COPS) in association with the Midwest Forensic Resource Center*

- Provided development work as the sole programmer.
- Developed system for designing and creating customer satisfaction surveys.
- Developed web-based software for ease of dissemination and collection of surveys.
- Decided upon needed questions and constructs for the surveys.

Feasibility and Proof of Concept of Utilizing Radio Frequency Identification Tagging Technology to Manage Evidentiary Materials in Forensic Laboratories: Technical Innovations in Management and Infrastructure. July, 2006 – May 2007

Grant funded by *National Institute of Justice and Midwest Forensic Resource Center*

- Provided development work as the sole programmer.
- Developed system utilizing RFID technology to improve the process of gathering and analyzing evidence for crime labs.
- Developed 2D bar-coding system for backup to RFID.
- Developed forms based computing system for use in a Tablet PC, evidentiary analysis environment.

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## TEACHING EXPERIENCE

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### Teaching Interests

- Network Telecommunications Infrastructure
- Quantitative Research Methods and Statistics
- Database Design and Administration
- Computer and Network Security
- Programming

**MSIS 4233/5233: Applied Information Assurance** 2014 – 2022  
*Oklahoma State University, Stillwater, OK*

- Completely hands-on course on offensive techniques of cyber attackers.
- Implemented individual lab module using ESXi virtualization technology.
- Teach both online and in-person sections.

**MSIS 4523/5203: Infrastructure Development** 2013 – 2022  
*Oklahoma State University, Stillwater and Tulsa, OK*

- Infrastructure development course for MIS majors.
- Implemented lab module using ESXi virtualization technology.
- Teach both online and in-person sections.

**MSIS 6303: Overview of Information Systems Research** Fall 2014, Fall 2021  
*Oklahoma State University, Stillwater, OK*

- Ph.D. seminar on seminal and current research in the MSIS Ph.D. program.

**MKTG 6413: Advanced Marketing Research** F 2014, F 2015, F 2016, S 2018  
*Oklahoma State University, Tulsa, OK*

- Multilevel statistical modeling for doctoral students in executive Ph.D. program.



- MSIS 6343: Advanced Methods in MSIS Research** Spring 2016  
*Oklahoma State University, Stillwater, OK*
- Ph.D. seminar on methodological issues for doctoral students in the MSIS Ph.D. program.
- MSIS 6313: Privacy and Security Research in Information Systems** Fall 2015  
*Oklahoma State University, Stillwater, OK*
- Ph.D. seminar on security, privacy, and trust for doctoral students in the MSIS Ph.D. program.
- HCI/PSYCH 522: Scientific Methods in Human Computer Interaction** Spring 2013  
*Iowa State University, Ames, IA*
- Research methods course for masters and doctoral students in the HCI program.
  - Covered wide range of topics including experimental/non-experimental designs, between/within-subjects designs, and qualitative research.
  - Taught both in-class and online concurrently.
- MIS 435: Information Systems Infrastructure** Fall 2012  
*Iowa State University, Ames, IA*
- Networking course for MIS majors.
  - Implemented new group lab module using ESXi virtualization technology.
- MIS 207: Fundamentals of Computer Programming** Fall 2011, Spring 2012  
*Iowa State University, Ames, IA*
- Introductory object-oriented programming course for MIS majors.
  - Developed entire course from scratch (first time the course was offered).
- MIS 434: Electronic Commerce Strategy** Fall 2010  
*Iowa State University, Ames, IA*
- Course on the strategic use of electronic commerce by the organization.
  - Implemented new lab module.
- HON 322: Tracking Technologies: Contemporary Uses of RFID** Spring 2007  
*Iowa State University, Ames, IA*
- Helped develop material for a new honors course dealing with contemporary tracking technologies including radio frequency identification (RFID) tagging and 2D barcodes.
  - Co-taught course by preparing and delivering ½ of the lectures and checking all assignments, projects, etc.
- MIS 330: Management Information Systems** Fall 2006  
*Iowa State University, Ames, IA*
- Taught introductory computer concepts to business students.
  - Implemented a multi-part lab assignment never before used in the course.

## Preparing Future Faculty

August, 2005 – December, 2006

*Iowa State University, Ames, IA*

- Achieved the status of Scholar and a graduate certificate for completing all four semesters of work.
- Discussed topics with faculty panelists such as promotion and tenure, service, and teaching success which are important for development as a university/college professor.
- Teaching and programming lab component for one week of an undergraduate course in electronic commerce.
- Teaching and programming lab component for two weeks of a graduate course in database systems.
- Developed and evaluated assignments which coincided with the lectures in each of the above classes.

## Doctoral Students

- Qinhui Wang, Major professor current  
*Oklahoma State University*
- Caleb Krieger, Major professor current  
*Oklahoma State University*
- Jerome Kirtley, Committee member current  
*Oklahoma State University*  
Interruptions and Habit
- Siddharth Baswani, Outside committee member Summer 2022  
*Iowa State University*  
Adoption of Digital Objects
- Gabriel Bahr, Committee member Summer 2022  
*Oklahoma State University*  
ICT4D
- Pankush Kalgotra, Committee member Summer 2017  
*Oklahoma State University*  
Healthcare Analytics
- Peter (Nan) Liang, Committee member Spring 2017  
*Oklahoma State University*  
Deception Detection
- Hamed Majidi Zolbanin, Committee member Spring 2016  
*Oklahoma State University*  
Improving Healthcare Outcomes by Business Analytics
- Michiel Bosman, Committee member Fall 2015  
*Oklahoma State University*  
“Leadership Climate, Attitudes, and Evidence-Based Management Behavior”
- Dawn Laux, Committee member Fall 2014  
*Iowa State University*  
“A Model for Measuring Student Persistence through Collaborative Learning”

## Master’s Students

- Yen-Yao Wang, Advisor Spring 2008  
*Iowa State University*  
“Antecedents of Review and Recommendation Systems Acceptance”

## Undergraduate Students

- Erin Stewart – Freshman Scholars Program 2020-2021  
*Oklahoma State University*  
“Virtual Meeting Webcam Usage”
- Sierra Steelman – Freshman Scholars Program 2019-2020  
*Oklahoma State University*  
“Millennial and GenZ TV Viewing Habits”
- Brittany Hickerson – Honors Thesis Spring 2019  
*Oklahoma State University*  
“A Look Into Systemic Lupus Erythematosus Diagnoses”
- Riley Curtis – Honors Thesis Spring 2019  
*Oklahoma State University*  
“Multifactor Authentication”
- Riley Curtis – Honors Contract Spring 2019  
*Oklahoma State University*  
“Raspberry Pi to Teach Secure Wireless Networking”
- Kyle Frank – Honors Thesis Fall 2018  
*Oklahoma State University*  
“Mandatory and Monitored RFID Use”
- Carson Walker – Honors Contract Fall 2017  
*Oklahoma State University*  
“Using Raspberry Pi as a WAP using OpenWRT”
- Amanda Brown – Honors Contract Fall 2016  
*Oklahoma State University*  
“Lab Update to Recent Server Versions”
- Daniel Wang – Honors Thesis Spring 2016  
*Oklahoma State University*  
“Reddit Visualization”
- Daniel Wang – Honors Contract Fall 2014  
*Oklahoma State University*  
“Old Windows Installations”
- Luke Henkenius – Honors Contract Spring 2014  
*Oklahoma State University*  
“Hacktivism”
- Bidwell, Zeb, Advisor Spring 2008  
*Iowa State University*  
“Radio Frequency Identification”

## Guest Lectures

- Multilevel Modeling Spring 2014  
*Oklahoma State University, Tulsa, OK*  
Executive Ph.D. Program
- Overview of multilevel modeling and its use in research.
- Using the ISERink Network Testbed in an Introductory Network Course Spring 2014  
*Iowa State University, Ames, IA*  
NSF-sponsored Conference
- Presented on my use as a beta tester of a new network testbed that was being deployed to other schools.
- Project Server for Project Management Spring 2010  
*Iowa State University, Ames, IA*  
MIS 539 – Project Management
- Lecture concerning use of Project Server and its integration with the project management process.
- Utilizing SharePoint for Your MBA Education Fall 2009  
*Iowa State University, Ames, IA*  
Orientation – Fulltime MBA Program
- Lecture concerning basic use of SharePoint.
  - Provide examples of SharePoint use during an MBA program.
- SharePoint Administration Summer 2008  
*Iowa State University, Ames, IA*  
HCI 594 – Organization Applications of Collaborative Technologies and Social Media
- *Online* lecture pertaining to SharePoint administration basics.
- Teaching a Course on Your Own & August, 2006  
Challenging Situations: Dealing with Stress, Students, and Superiors  
*Iowa State University, Ames, IA*  
2006 University Teaching Seminar
- Provided advice and tips during two sessions for new teaching assistants at Iowa State.
  - In the first session, presented advice for teaching your first standalone course.
  - In the second session, led a panel discussing possible problems and associated solutions while being a teaching assistant.
- Database Programming Using ASP.NET Fall 2004  
*Iowa State University, Ames, IA*  
MIS 533 – Data Management for Decision Makers
- Lectured on the use of ASP.NET as a front-end to the database systems the students were discussing and developing in class.

*Iowa State University, Ames, IA*

MIS 434 – Electronic Commerce

- Lectured on the use of ASP.NET as a mechanism for website development and how it interacts with the datasource(s) on the backend.

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## WORK EXPERIENCE

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### **Systems Support Specialist**

January, 2005 – August 2013

*Iowa State University College of Business, Ames, IA*

- Developed software systems for college including a kiosk system, undergrad advisee cataloging system, current class list modification system, online employee timecard system, employee profile updating system, as well as many other projects.
- Assisted faculty and staff with various systems-related issues.

### **Software Engineering Intern**

May, 2005 – August, 2005

*IBM Corporation, Rochester, MN*

- Analyzed, developed, implemented, and optimized changes in the automatic compilation of Linux kernels to allow compatibility with iSeries mainframes; adding a time savings from over 30 minutes down to 2.
- Developed an implementation plan for utilizing the above project in production.

### **Software Development Intern**

May, 2004 – August, 2004

*Rockwell Collins Incorporated, Cedar Rapids, IA*

- Cleared TOP SECRET to enable analysis of TS material.
- Analyzed AES encryption algorithm along with another TS algorithm. Coded AES in software program.
- Developed a departmental website using Microsoft ASP.NET.
- Worked with management to alleviate Change Request backlog and help develop progress reports.

### **SNEIP Intern (Summer Network Evaluation Intern Program)**

May, 2003 – August, 2003

*National Security Agency, Fort George Meade, MD*

- Cleared TOP SECRET (TS)\Sensitive Compartmented Information (SCI)\TALENT-KEYHOLE (TK) after an Agency Special Background Investigation (SBI) and polygraph.
- Worked with an Architecture Team to conduct penetration tests to verify security for hardware devices (routers, firewalls, switches, printers, etc.) both in-house and offsite.
- Developed software to aid in the gathering and analyzing of penetration-testing data.

### **Application Development Intern**

May, 2002 – August, 2002

*EFCO Corporation, Des Moines, IA*

- Developed Access Forms and Reports as a front to a Microsoft SQL Server Database.
- Implemented Microsoft ADO and DAO using Visual Basic in the background to modify the database.

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## CERTIFICATIONS

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- Server Virtualization with Windows Server Hyper-V and System Center
  - Network+
  - Microsoft Certified Systems Administrator
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## MEMBERSHIPS

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- AIS October, 2005 – Present
  - ACM October, 2005 – Present
  - IEEE September, 2005 – Present
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## AWARDS AND HONORS

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- Regents Distinguished Teaching Award 2022  
*Oklahoma State University*
- Greiner Undergraduate Teaching Award (College of Business sole recipient) 2022  
*Oklahoma State University*
- William S. Spears Professorship in Business 2021-present  
*Oklahoma State University*
- Spears Award for Innovation in Pedagogy 2021  
*Oklahoma State University*
- Distinguished Early Career Faculty Award (College of Business sole recipient) 2021  
*Oklahoma State University*
- William S. Spears Fellow in Business 2019-2021  
*Oklahoma State University*
- MSIS 2016 Department Faculty Award 2016  
*Oklahoma State University*
- Richard W. Poole Research Excellence Award 2016  
*Oklahoma State University*
- Graduate Research Excellence Award 2013  
*Iowa State University*
- Graduate Teaching Excellence Award 2013  
*Iowa State University*
- IEEE Transactions on Education Best Paper Award 2011  
*IEEE Education Society*
- Saturday MBA Top Performing Student 2009  
*Iowa State University*
- Saturday MBA Top Performing Team 2009  
*Iowa State University*
- Graduate Research Excellence Award 2009  
*Iowa State University*
- Golden Key International Honor Society Inductee 2009  
*Iowa State University*
- Graduate and Professional Student Senate Research Award 2008  
*Iowa State University*
- Graduate Teaching Excellence Award 2007  
*Iowa State University*

- Beta Gamma Sigma Inductee 2004  
*Iowa State University*
- Top Senior in Computer Science 2002  
*Simpson College*
- Top Junior in all Sciences 2001  
*Simpson College*

## SERVICE

### Department

- Ph.D. Committee Fall 2013 – present
- Telecom Lab Manager Summer 2014 – present
- MSIS Hiring Committee Fall 2016, Fall 2017, Spring 2018, Fall 2022
- RPT document committee 2021
- Telecom Lab New Build Summer 2018
- Undergraduate Commencement F 2014, S/F 2015, S/F 2016, S/F 2017, S/F 2018
- OSU Up Close Fall 2016, Fall 2017, Fall 2018  
Conducted password cracking lab with six groups of high school juniors and seniors.
- OSU Scholars Day Fall 2017, Fall 2018  
Conducted password cracking lab with groups of high school seniors.
- ISyTE high school summer camp instructor (led three sessions) Summer 2014, 2015, 2016, 2017, 2018
- Telecom Lab Demolition Specialist Summer 2014, 2015
- Southwest CCDC Competition Faculty Advisor Spring, 2015
- Ph.D. Colloquium Organizer Spring 2015
- NSA CAE Recertification committee Fall 2014
- Telecom lab server reorganization Summer 2014
- IA program revamp and masters addition committee Summer 2014

### University

- President's K-12 STEM committee December 2021

### Profession

- President MWAIS 2022 - 2023
- Reviewer ISR Fall 2022
- Reviewer DSS Summer 2022
- Program committee MWAIS Spring 2022
- Program committee MWAIS Spring 2020
- Reviewer for MWAIS Spring 2020
- Big12++ MIS Research Symposium Web Mastermind Fall 2017 – Spring 2018
- Reviewer for JMIS Fall 2016, Fall 2017
- Reviewer I&M Fall 2017
- Program committee and session chair for MWAIS Spring 2017
- Reviewer for DS Fall 2016

- Reviewer for HICSS Summer 2016
- Reviewer for AMCIS Spring 2016
- Program committee for MWAIS Spring 2016
- Reviewer for MWAIS Spring 2016
- Reviewer for DS Spring 2016
- Reviewer for ICIS Summer, 2015
- Reviewer for 14th Annual Big XII MIS Research Symposium Spring, 2015
- Reviewer for EJIS Spring 2014
- Reviewer for MWAIS Spring 2014
- Session chair for MWAIS Spring 2014
- Reviewer for ICIS Summer, 2013
- Reviewer for 12th Annual Big XII MIS Research Symposium Spring, 2013
- Reviewer for ICIS Summer, 2011
- Reviewer for PACIS Spring, 2011
- Reviewer for MWAIS Spring, 2011
- Invited Presentation January 27, 2010  
Security and Human Computer Interaction: Finishing a Ph.D. Dissertation  
*Simpson College*
- Reviewer for Journal of Database Management Spring, 2009
- Reviewer for SIGHCI (AMCIS 2009) Spring, 2009
- Session Chair for SIGHCI (AMCIS 2008) August 16, 2008
- Birds-of-a-Feather session facilitator (AMCIS 2008) August 14, 2008
- Invited Presentation January 27, 2010  
Security and HCI: Finishing a Ph.D. Dissertation  
*Simpson College*
- Invited Presentation April 4, 2008  
A Framework for Intrusion Detection Visualization  
*Iowa State University*  
Emerging Technologies Conference 2008
- Reviewer for 5th Annual Big XII MIS Research Symposium Spring, 2007
- Invited Presentation October 24, 2005  
Life after Simpson: Internship and Grad School Experiences  
*Simpson College*  
Computer Science Seminar Series

### **Community**

- Tutoring February 9, 2016  
*Stillwater, OK*  
Tutored local area middle school cub scouts in the basics of passwords, security, and pen testing.
- GRIP Mentoring (Great Relationships In Pairs) January, 2007 – May, 2010  
*Gilbert, IA*  
Mentor local middle school student by meeting with him once per week for lunch and activities.



- Mentoring Spring, 2006  
*Ankeny, IA*  
Mentored local at-risk high school student once per week.
- Tutoring August, 2005  
*Rochester, MN*  
Tutored local area high school students in Visual Basic programming through an educational cooperative headed by IBM.