SHERRI K. WEITL-HARMS

Curriculum Vita

Department of Computer Science, Design & Journalism
Creighton University
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EDUCATION

- Ph.D., Computer Engineering & Computer Science, University of Missouri – Columbia, 2002
  Cumulative GPA: 4.00/4.00. Dissertation: *Associating and Predicting Episodes in Multiple Time Series for Supporting Policy Decision Making*.
- MS, Iowa State University, 1990. Major: Computer Science
  Thesis: *Comparison of Nested Query Performance of Four Relational Database Management Systems*.
- BS, Buena Vista University, 1987. Major: Computer Science/Math/Education; Summa Cum Laude
  Iowa Teacher's Certificate 234534, Endorsement in Secondary Education, Mathematics, 1987-1997.

ACADEMIC EXPERIENCE

- **Associate Professor**, Creighton University (CU), Department of Computer Science, Design, & Journalism, 2023 – present
- **Professor**, University of Nebraska at Kearney (UNK), Department of Cyber Systems, formerly Computer Science and Information Technology (CSIT), 2010 – 2023; Associate Professor, 2005–2010, Assistant Professor, 2002–2005, Lecturer, 2001–2002
- **Department Chair**, UNK, Cyber Systems/CSIT Department, 2007–2019
- **Instructor**, University of Nebraska at Lincoln (UNL), Computer Science & Engineering Dept, 1999–2001
- **Instructor/Assistant Professor**, Lincoln University, Jefferson City, MO, Computer Information Systems, 1993–1999
- **Instructor/Asst. Coordinator Academic Computing**, Fort Hays State University, Department of Computer Information Systems, 1990–1991

IT PROFESSIONAL EXPERIENCE

- **Facilitator/Analyst Consultant,** USDA, 1994**.**
- **Programmer/Analyst**, Missouri Farm Bureau, Jefferson City, MO, 1992–1993
- **Programmer/Analyst**, Intelligent Business Systems, Jefferson City, MO, 1992
- **Database Intern,** IBM, Rochester, MN, 1989
- **Database Analyst,** Buena Vista University, Storm Lake, IA, 1987–1988

RESEARCH & SCHOLARSHIP

PEER REVIEWED PUBLICATIONS

- Weitl-Harms, S., Hastings J.D., Lum, J., Lee, J. (accepted, 2026). *Quantifying Implicit User Sentiment Using Large Language Models: Efficient Analysis of Product Satisfaction from Qualitative Data,* in **Recent Advances in Deep Learning:** New Techniques and Practical Examples (2nd ed.), Onyekpe, U., Palade, V., &

Wani, M.A. (Eds.) Chapman and Hall/CRC.

- Weitl-Harms, S. (2025). *The Human-Centered Design with Iterative Service-Learning Framework: Applied to Small Rural Organizations,* **Journal of Organizational Psychology (JOP),** 2025(1), DOI: https://doi.org/10.33423/jop.v25i1.
- Hastings, John D., Weitl-Harms, S., Doty, J., Myers, Z., Thompson, W. (2024). *Utilizing LLMs to Produce Synthetic PDT Datasets*, **Proceedings of IEEE International Conference on Big Data**, **Workshop 42 From Theory to Practice: Workshop on Large Language and Foundation Models,**
- Weitl-Harms, S., Lum, J., Hastings J.D. (2024). *Using LLMs to Establish Implicit User Sentiment of Software Desirability,***23rd IEEE Intnl Conf on Machine Learning and Applications, Special Session 2: Machine Learning for Natural Language Processing,** December 2024.
- Weitl-Harms, S. (2024). *Iterative Service-Learning: A Computing-Based Case-study Applied to Small Rural Organizations,* **IEEE Frontiers in Education**, 2024. DOI: 10.1109/FIE61694.2024.10893069
- Weitl-Harms, S., Hastings, J., & Powell, J. (2024*). Toward Automated Knowledge Discovery in Case-Based Reasoning.* **37TH International FLAIRS Conference Proceedings,** *37*(1).
- Weitl-Harms, S. (2024). *Using Service-Learning Projects to Introduce Social Media Marketing to Small Rural Organizations.* **18th International Technology, Education and Development Conference Proceedings**
- Mallipeddi, R., Schaaf, C., Subramaniam, M., Parakh, A. Weitl-Harms, S. (2023). *A Framework for an Intelligent Adaptive Education Platform for Quantum Cybersecurity,* **2023 IEEE Frontiers in Education**, 2023, pp. 1-5, doi: 10.1109/FIE58773.2023.10343010.
- Weitl-Harms, S., Spanier, A., Hastings, J. D. (2023). *Framing Gamification in Undergraduate Cyber Security Education,* **Journal of Colloquium on Information Systems Security Education,** Vol. 10, (1), 2023.
- Weitl-Harms, S. K., Spanier, A., Hastings, J. D., Rokusek, M. (2023). *Assessing User Experiences with ZORQ: A Gamification Framework for Computer Science Education.* **Hawaii International Conference on System Sciences (HICSS-56)**, Gamification Mini-Track, January 2023.
- Weitl-Harms, S., Spanier, A., Hastings, J. D. (2023*). A Systematic Mapping Study on Gamification for Undergraduate Cyber Security Education,* **Journal of Cybersecurity Education, Research and Practice, vol. 2023, issue 1.**
- Hastings, J. D., Weitl-Harms, S., Spanier, A., Rokusek, M., Hensey, R. (2022). *ZORQ: A Gamification Framework for Computer Science Education,* **IEEE Frontiers in Education**, Oct2022.
- Weitl-Harms, S. (2022). *Database Service-Learning Projects: Addressing Community Needs While Measuring and Meeting Computer Science Learning Outcomes.* **IEEE 10th International Conference on Information and Education Technology (ICIET)**, Matsue, Japan, April 9-11, 2022.
- Spanier, A., Harms, S. K., Hastings, J. D. (2021). *A Classification Scheme for Gamification in Computer Science Education: Discovery of Foundational Gamification Genres in Data Structures Courses.* **IEEE Frontiers in Education**, Oct 2021, 9.
- Zhang, B., Schilder, F., Smith, K., Harms, S. K., Tadesse, T., Hayes, M. J. (2021). *TweetDrought: A Deep-Learning Drought Impacts Recognizer based on Twitter Data.* **Climate Change AI workshop at ICML International Conference on Machine Learning** July 2021.
- Agrawal, V. K., Agrawal, V. K., Chau, N. N., Harms, S. K. (2020). *Contributing Factors and Trends in the Usage of IT Outsourcing in Manufacturing and Service Sectors.* **Information Technology and Management Science**, vol. 23 (2020).
- Agrawal, V. K., Agrawal, V. K., Chau, N. N., Miller, M. J., Harms, S. K. (2020). *Current and Future Contributing Factors and Trends in the Usage of IT Cloud Computing in Manufacturing and Service Sectors.* **Information Technology and Management Science**, vol. 23 (2020).
- Harms, S. K. (2017). *Tackling CS education in K-12: Implementing a Google CS4HS Grant*

Program. La Crosse, WI: 2017 **Midwest Instructional Computing Symposium Proceedings**.

- Harms, S. K., Hastings, J. D. (2016*). A Cross-Curricular Approach to Fostering Innovation such as Virtual Reality Development through Student-Led Projects*. **IEEE Frontiers in Education**, 9.

- Harms, S. K. (2016). *Enabling Student Innovation through Virtual Reality Development*. Cedar Rapids, IA: 2016 **Midwest Instructional Computing Symposium Proceedings**.

- Harms, S. Tadesse,T., Wardlow, B. (2014) *Improving Drought Risk Modelling: Using Multiple Periods of Satellite Data with Ensembles of Data Mining Algorithms,* **International Journal of Society Systems Science (IJSSS)**, Vol. 6, No. 2.(June 2014).

- Harms, S., Hastings, J., Jussel, M. (2013). *Assessing Writing in Computer Science Bachelor of Science Degree Programs,* **Midwest Instructional Computing Symposium Proceedings**, April 20, 2013.

- Harms, S. (2012). *Database Systems Course: Service Learning Project,* **Midwest Instructional Computing Symposium Proceedings,** April 14, 2012.

- Harms, S. Tadesse,T., Wardlow, B. (2009). *Algorithm and Feature Selection for VegOut: A Vegetation Condition Prediction Tool,* J. Gama et al. (Eds.): **Discovery Science 2009, Lecture Notes in Artificial Intelligence 5808**, pp. 107–120.

- Harms, S. (2009), *Temporal Event Sequence Rule Mining,* **Data Warehousing and Mining Encyclopedia**, 2nd Edition. J. Wang, ed., Idea Group Inc., 2009, pp. 1098-1102.

- Taylor, A. R., Maughan, S. L., Obermier, T., & Harms, S. K. (2008). *Technological Infrastructure Needs in Rural Nebraska.* **Economics & Business Journal: Inquires & Perspective***s,* Vol. 1, No. 1. October 2008, pp. 56-65.

- Harms, S. (2005). *Temporal Association Rule Mining in Event Sequences,* **Data Warehousing and Mining Encyclopedia**, J. Wang, ed., Idea Group Inc., 2005, pp. 1098-1102.

- Tadesse, T., Wilhite, D. A., Hayes, M. J., Harms, S. K., Goddard, S. (2005). *Discovering Associations between Climatic and Oceanic Parameters to Monitor Drought in Nebraska Using Data-Mining Techniques*, **Journal of Climate** 18 (10), May 2005, pp. 1541-1550.

- Tadesse, T., Wilhite, D., Harms, S., Hayes, M., Goddard, S. (2004). *Drought monitoring using data mining techniques,* **Journal of Natural Hazards**, 33(1), September 2004, pp. 137-159.

- Kozal, D., Culver, M., Harms, S. (2004). *A Design for Knowledge Discovery Decision Support Systems (KD-DSS) with Spatio-Temporal Data,* **Proc. 2nd International Conf on Computing, Communications & Control Technologies (CCCT 2004),** Volume 2, Austin, TX, August 14-17, 2004, pp. 172-174. (Acceptance rate: 550/1000 papers)

- Waltman, W.J., Goddard, S., Reichenbach, S. E., Svoboda, M. D., Hayes, M. J., Peake, J. S., Harms, S., Tadesse, T., Deogun, J. (2004). *Digital Government: Reviving the Newhall Simulation Model to Understand the Patterns and Trends of Soil Climate Regimes and Drought Events,* **Proceedings of the 2004 National Conference on Digital Government**, Seattle, WA, May 2004, pp. 117-126.

- Goddard, S., Deogun, J., Harms S., et al., (2004). *A Geospatial Decision Support System for Drought Risk Management,* **Proceedings of the 2004 National Conference on Digital Government**, Seattle, WA, May 2004, Article 50.

- Kozal D., Culver, M., Harms, S., (2004). *A Knowledge-based Geo-Spatial Decision Support System for Drought Assessment*, **Proceedings of the 2004 National Conference on Digital Government,,** Seattle, WA, May 2004, pp. 277-278.

- Harms, S. K., Deogun, J. (2004). *Sequential Association Rule Mining with Time Lags*, **Journal of Intelligent Information Systems (JIIS).** 22 (1), January 2004, pp. 7-22.

- Li, D., Deogun, J., Harms, S.K. (2003). *Interpolation Techniques for Geo-spatial Association Rule Mining*, **Lecture Notes in Artificial Intelligence 2639, Rough Sets, Fuzzy Sets, Data Mining, and Granular Computing,** **Proceedings of the 9th. International Conference, RSFSDGrC 2003**, G.

Wang, Q. Liu, Y. Ya, A. Skowron eds., Springer Verlag, October 2003, pp. 573-580.

Li, D., Harm, S. K., Goddard W., Waltman, W.J., Deogun, J. (2003). *Time-Series Data Mining in a Geo-spatial Decision Support System,* **Proceedings of the 2003 National Conference on Digital Government,**, Boston, MA, May 2003, pp. 387-390.

- Harms, S. K., Deogun, J., Goddard, S. (2003). *Building Knowledge Discovery into a Geo-spatial Decision Support System*, **2003 ACM Symp Applied Computing**, Melbourne, FL, Mar 2003, pp. 445-449.

- Goddard, S., Harms, S., Reichenbach, S., Tadesse, T., Waltman, W. (2003). *Geospatial Decision Support for Drought Risk Management,* **Comms of the ACM**. 46 (1), January 2003, pp. 35-38.

- Tadesse, Tsegaye, Hayes, Michael J., Wilhite, Don A., Harms, Sherri K. (2002). *Data Mining and Knowledge Discovery of Drought in Nebraska,* **Extended Abstract, 15th Conf. on Biometeorology/Aerobiology and 16th Congress of Biometeorology**, October 27-Nov 1 2002, Kansas City, MO. https://ams.confex.com/ams/15BioAero/webprogram/Paper48714.html

- Harms, S. K., Deogun, J., Tadesse, T. (2002). *Discovering Sequential Association Rules with Constraints and Time Lags in Multiple Sequences*, **Lecture Notes in Artificial Intelligence 2366: Foundations of Intelligent Systems, Proceedings of the 13th International Symposium on Methodologies for Intelligent Systems,** Lyon, France, June 27-29 2002, pp.432-441.

  Harms, S. K., Li, D., Deogun, J. (2002). *Efficient Rule Discovery in a National Agriculture Decision Support System*, **Proceedings of the 2002 National Conference on Digital Government,**, Los Angeles, CA, May 2002, pp. 235-241.

- Harms, S. K., Saquer, J., Deogun, J., Tadesse, T. (2001). *Discovering Representative Episodal Association Rules from Event Sequences Using Frequent Closed Episode Sets and Event Constraints,* **Proceedings of the ICDM '01: The 2001 IEEE International Conference on Data Mining,** Silicon Valley, CA, November 29 - December 2, 2001, pp. 603-606.

- Harms, S. K., Reichenbach, S. Goddard, S. E., Tadesse, T., Waltman, W. J. (2001). *Data Mining in a Geospatial Decision Support system for Drought Risk Management*, **Proceedings of the 2001 National Conference on Digital Government**, May 2001, Los Angeles, CA, pp. 9-16.

SOFTWARE and OTHER ARTIFACTS (Partial Listing)

- J. Hastings, S. Weitl-Harms, J. Doty, Z. Myers, and W. Thompson. (2024). Synthetic product desirability datasets for sentiment analysis testing, (1.0.0), 2024. DOI: 10.5281/zenodo.14188456.

- Weitl-Harms, S., Spanier, A., Hastings, J. D. (2024). *Cyber Security Operations Educational Gamification Application Listing,* **Arxiv**, https://arxiv.org/abs/2406.17882, doi: 10.48550/arXiv.2406.17882.

  Weitl-Harms, S., Spanier, A., Hastings, J. D. (2022). Cyber Security Gamification Application Listing at https://bit.ly/3S260GS.

- Hastings, J. D., Harms, S., Hensey, R., Spanier, A., Rokusek, M. ZORQ (2022), ZORQ project public repository, https://gitlab.com/ZORQTEAM/zorq.

- Harms, S. K., Jones, W. (2018). UNK Social Media Assistance Website. socialmedia.csit.unk.edu.

- Harms, S. K. (2006). The High Plains Initiative for Integrated Phenology. phenology.unk.edu.

SCHOLARLY PRESENTATIONS

- Weitl-Harms, S., Lum, J., Hastings J.D. (2024). *Using LLMs to Establish Implicit User Sentiment of Software Desirability,* **23rd IEEE International Conference on Machine Learning and Applications, Special Session 2: Machine Learning for Natural Language Processing,** December 19, 2024.

- Hastings, John D., Weitl-Harms, S., Doty, J., Myers, Z., Thompson, W. (2024). *Utilizing LLMs to Produce Synthetic PDT Datasets*, **IEEE International Conference on Big Data**, **Workshop 42**

From Theory to Practice: Workshop on Large Language and Foundation Models, December 16, 2024.

- Weitl-Harms, S. (2024). *Iterative Service-Learning: A Computing-Based Case-study Applied to Small Rural Organizations,* **2024 IEEE Frontiers in Education**, October 15, 2024.
- Weitl-Harms, S., Hastings, J., & Powell, J. (2024). *Toward Automated Knowledge Discovery in Case-Based Reasoning.* **The 37th International FLAIRS Conference**, May 21, 2024.
- Weitl-Harms, S. (2024). *Using Service Learning Projects to Introduce Social Media Marketing to Small Rural Organizations.* **18th International Technology, Education and Development Conference** Valencia, Spain, March 6, 2024.
- R. Mallipeddi, C. Schaaf, M. Subramaniam, A. Parakh and S. Weitl-Harms, "A Framework for an Intelligent Adaptive Education Platform for Quantum Cybersecurity," *2023 IEEE Frontiers in Education Conference (FIE)*, College Station, TX, USA , October 2023.
- Agrawal, V. K., Agrawal, V. K., Khanna, P., Harms, S., Menon, A. (2023). *Addressing the Challenges with Integration and Interoperability of Healthcare Management Data.* 33rd Annual Production and Operations Management Society (POMS) Conference, Orlando, FL, May 2023.
- Agrawal, V. K., Agrawal, V. K., Khanna, P., Harms, S., Menon, A. (2023). *Alternative Solutions to Address Integration and Interoperability of Healthcare Management Data.* 33rd Annual Production and Operations Management Society (POMS) Conference, Orlando, FL, May 2023.
- Weitl-Harms, S. K., Spanier, A., Hastings, J. D., Rokusek, M. (2023). *Assessing User Experiences with ZORQ: A Gamification Framework for Computer Science Education.* Hawaii International Conference on System Sciences (HICSS-56), Gamification Mini-Track, 2023.
- Weitl-Harms, S., Spanier, A., Hastings, J. D. (2022). *Framing Gamification in Undergraduate Cyber Security Education,* Colloquium on Information Systems Security Education (CISSE), 2022.
- Weitl-Harms, S., Spanier, A., Hastings, J. D. (2022). *A Systematic Mapping Study on Gamification for Undergraduate Cyber Security Education,* Conference on Cybersecurity Education, Research and Practice (CCERP), 2022.
- Hastings, J. D., Weitl-Harms, S., Spanier, A., Rokusek, M., Hensey, R. (2022). *ZORQ: A Gamification Framework for Computer Science Education*, IEEE Frontiers in Education, 2022.
- Weitl-Harms, S. K. (Author & Presenter). IEEE 10th International Conference on Information and Education Technology (ICIET 2022), "*Database Service-Learning Projects: Addressing Community Needs While Measuring and Meeting Computer Science Learning Outcomes,*" Virtual. April 2022.
- Spanier, A. (Author & Presenter), Harms, S. K. (Author & Presenter), Hastings, J. D. (Author). IEEE Frontiers in Education, "*A Classification Scheme for Gamification in Computer Science Education:*
- *Discovery of Foundational Gamification Genres in Data Structures Course,*", Lincoln, NE. October 2021.
- Zhang, B. (Author & Presenter), Schlider, F. (Author), Smith, K. (Author), Hayes, M. (Author), Harms, S. K. (Author), Tadesse, T. (Author). ICML 2021 International Conference on Machine Learning: Climate Change Workshop, "*TweetDrought: A Deep-Learning Drought Impacts Recognizer based on Twitter Data,*" Virtual. July 2021.
- Harms, S. K. (Author & Presenter). (2017). *Tackling CS education in K-12: Implementing a Google CS4HS Grant Program.* La Crosse, WI: 2017 Midwest Instructional Computing Symposium (MICS), April 2017.
- Harms, S. K. (Author & Presenter), Hastings, J. D. (Author). (2016*). A Cross-Curricular Approach to Fostering Innovation such as Virtual Reality Development through Student-Led Projects*. IEEE Frontiers in Education, October 2016.
- Harms, S. K. (Author & Presenter), Hastings, J. D. (Author), "*Enabling Student Innovation through*

Virtual Reality Development," 2016 MICS, April 2016.

- Harms, S. (Author & Presenter), Hastings, J. (Author), Jussel, M. (Author). (2013). *Assessing Writing in*
  Computer Science Bachelor of Science Degree Programs, 2013 MICS, April 20, 2013.
- Harms, S. *Database Systems Course: Service Learning Project*, 2012 MICS**,** April 14, 2012.
- Harms, S. K. (Author & Presenter), Deogun, J. (Author), Goddard, S. (Author). 2003 ACM Symposium on Applied Computing, "*Building Knowledge Discovery into a Geo-spatial Decision*," Melbourne, FL. (March 2003).
- Harms, S. K. (Author & Presenter), Deogun, J. (Author), Goddard, S. (Author), Tadesse, T. (Author). ISMIS '02: The 13th International Symposium on Methodologies for Intelligent Systems, "Discovering Sequential Association Rules with Constraints and Time Lags in Multiple Sequences," Lyon, France. (June 27, 2002).
- Harms, S. K. (Author & Presenter), Tadesse, T. (Author). The First National Conference on Digital Government, "Discovering Association between Climatic and Environmental Variables for Supporting
  Drought Decision Making," Los Angeles, CA. (May 2001).

INVITED TALKS & PANELS
- Weitl-Harms, S.K., *"Using LLMs in the Process of Automating Sentiment Analysis of Qualitative Data,* Marquette University, invited, November 2025.
- Harms, S. K. Tech Edge Conference, *"Integrating Computational Thinking Across the Curriculum,"* Kearney, NE. (2020).
- Harms, S. K. BMIT Standards Workshops: BMIT Fall Mini Conferences, "*Computer Science Principles,*" Nebraska Department of Education, Kearney, NE. (2019).
- Harms, S. K. Tech Edge Conference, "*CS in a Box,*" Kearney, NE. (2019).
- Harms, S. 2018 Rocky Mountain Celebration of Women in Computing, "*BOF: Undergraduate Research Challenges for Faculty and Students,*" Rocky Mountain Celebration of Women in Computing, Denver, CO. (2018).
- Harms, S. K. Nebraska Career Education Conference, "*Introduction to Computer Science,*" Nebraska Department of Education, Kearney, NE. (2018).
- Harms, S. K. (Author & Presenter), Dorn, B. (Author), Friend, M. (Author). "Google CS4HS *CS in a Box* Workshop," Norfolk, NE. (2017).
- Harms, S. K. Hispanic/Latino Summit, "*Making a Difference with Technology: Careers in the Future,*" Nebraska Council of School Administrators, Kearney, NE. (2017).
- Harms, S. K. Nebraska Fall Ed Tech Conference, "*CS Principles on the Prairie (CSPOP): Preparing Teachers to Teach CS,*" Nebraska Department of Education, Kearney, NE. (2017).
- Harms, S. K. Nebraska Career Education Conference, "*Mobile App Development,*" Nebraska Department of Education, Kearney, NE. (2017).
- Harms, S. K. Tech Edge Conference, "*Introduction to Coding for Teachers and Their Students,*" Kearney, NE. (2017).
- Harms, S. K. UNK Biz Kidz Camp for Entrepreneur Explorers ESI2016, "*Creating your own Mobile Apps,*" UNK Center for Rural Research and Development, Kearney, NE. (2016).
- Harms, S. K. Nebraska Career Education Conference, "*Mobile App Development,*" Nebraska Department of Education, Kearney, NE. (2016).
- Harms, S. K. IT Tech Expo2016 itx16.gips.org, "*Basic Mobile App Development,*" Grand Island Career Pathways Institute, Grand Island, NE. (2016).
- Harms, S. K. UNK Biz Kidz Camp for Entrepreneur Explorers ESI2015, "*Creating your own Mobile Apps,*" UNK Center for Rural Research and Development, Kearney, NE. (2015).

- Harms, S. K. Nebraska: Think IT, *"University of Nebraska at Kearney IT Programs*," Nebraska Department of Education Partnership for Innovation, Lincoln, NE. (2015).
- Waldren, V. (Moderator), Schlegelmilch, J. (Panelist), Harms, S. K. (Panelist), Dorsey, S. (Panelist). Broadband Connecting Nebraska Conference, "*Developing the IT Talent Pipeline*," AIM Institute, Kearney, NE. (2014).
- Harms, S. K. Broadband Connecting Nebraska Conference (Youth Track), "*The Basics of Coding,*" AIM Institute, Kearney, NE. (2014).
- Harms, S. K. (Author & Presenter), Alavi-Behbahani, A. (Moderator), Zheng, W. A. (Moderator). Kearney Area First Lego League Competition2014, "*UNK CSIS programs and mobile app demonstration,*" First Lego League, Kearney, NE. (2014).
- Harms, S. K. UNK Biz Kidz Camp for Entrepreneur Explorers ESI2013, "*Creating your own Mobile Apps,*" UNK Center for Rural Research and Development, Kearney, NE. (2013).
- Harms, S. K., Brummer, J., Houle, D., Tallmage, II, S. Kearney Area First Lego League Competition2013, "*UNK CSIS programs and mobile app demonstration,*" First Lego League, Kearney, NE. (2013).
- Harms, S. K. UNK Fall2012 College of Natural and Social Science (CNSS) Honors Convocation, "*Ten Lessons I Have Learned,*" UNK CNSS, Kearney, NE. (2012).
- Harms, S. K., Anderson, C. L. 2012 Rocky Mountains Conference for Women in Computing, "*The Challenges of Completing an Advanced Degree along a Non-Traditional Time-Line,*" Rocky Mountains Conference for Women in Computing, Fort Collins, CO. (2012).
- Harms, S. K. "*UNK Computer Science and Information Technology Student Activities,*" Shandong University at Weihai, Shandong University at Weihai. (2012).
- Harms, S. K. "*Using Data Mining Techniques for Drought Risk Modeling,*" Shandong University at Weihai, Shandong University at Weihai. (2012).
- Harms, S. K. Colorado Celebration of Women in Computing (CCWIC), "*The Integration Act-Blending your career, family, and personal life,*" Colorado. (2010).
- Harms, S. K. 4-H Technology Camp, "*Artificial Intelligence,*" 4-H, Alma, NE. (2006).
- Harms, S. K. Annual Early Awareness Day, "*Fun with Technology,*" UNK. (2006).
- Harms, S. K. Build a Computer Day, "*IT Careers,*" UNK. (2006).
- Harms, S. K. 4-H Technology Camp, "*Artificial Intelligence,*" 4-H, Alma, NE. (2005).
- Harms, S. K. Phenology and Environmental: Challenges and Opportunities Workshop, "*Progress of Our Workgroup,*" Lincoln, NE. (2005).
- Harms, S. K. Tadesse, T. USDA Drought Risk Assessment Advisory Panel, "*Data Mining and Knowledge Discovery of Drought and Crop Yields,*" Lincoln, NE. (2001).
- Harms, S. K., Tadesse, T. US Geological Service (USGS) Earth Resources Observation Systems (EROS) Data Center, "*Identifying the Association of Climatic and Physical Variables in Monitoring Drought to Support Decision Making,*" Sioux Falls, SD. (2001).
- Harms, S. K. UNL Department of Computer Science Colloquium, "*Comparison of Knowledge Discovery and Statistical Analysis on High School Drop-out Rates,*" Lincoln, NE. (1999).

FUNDED GRANTS

- Baker, C., Lumbard, K., Weitl-Harms, S., Fernandes, S., Rahman, W., Creighton Computing for Good Application Development Lab, Kingfisher Institute Mini-Seminar. $7500 (2025).
- Weitl-Harms, S., Educating the Wole Person in an AI-Driven World Designated Technology Project, Creighton University, $2000 (2025).
- Weitl-Harms, S., Using LLM Sentiment Analysis of User Experiences for Improved Product Analysis and Marketing, Creighton University Center for Undergraduate Research and Scholarship (CURAS) 24-'25 Magis! Investigatio Research Award (MIRA), $4946 (2024-2025).

- Weitl-Harms, S., Creating a Tool for Sentiment Analysis of User Experiences (SAUX), Creighton University Center for Undergraduate Research and Scholarship (CURAS) Summer Faculty Research Fellowship, $10,000 (2024).
- Weitl-Harms, S., Attend Virtual 18th Annual International Technology, Education and Development (INTED) Conference on March 4-6, 2024, Creighton University College of Arts and Sciences Faculty Development Grant, $450 (2024).
- Parakh, A. (Principal), Weitl-Harms, S. (Co-Principal), Subramaniam, S. (Co-Principal). Quark: An Intelligent Adaptive Education Platform for Quantum Cybersecurity, Nebraska Research Initiative (NRI) Collaboration Initiative, $149,397 (2022).
- Miller, M. J., Harms, S. K., "Cybersecurity Camp," EPSCoR funding, $24,908.00. (2019).
- Harms, S. K. (Principal), Gaskill, M. C. (Supporting), Google CS4HS Grant, CS Principles on the Prairie Phase I and II; $34,704.50. 2017-2018, $31,892.34, 2016-2017
- Harms, S. K. (Principal), Robinson, D. (Supporting), Nebraska Rural Futures Institute Grant, Facilitating the Implementation of Social Media Plans for Small Businesses & Local Non-Profits through Service Learning, $20,000.00. 2016-2018
- Harms, S. K. (Principal), Hartman, M. D. (Principal), U. Nebraska Kelly Grant: Technology Transparency in CS, CIS and Visual Communication and Design (VCD) Curricula, $24,000, 2010
- Taylor, A. R. (Principal), Harms, S. K. (Supporting), "*Information Technology Survey of Nebraska Rural Communities*," Sponsored by UNK Collaborative Grant, UNK, $3,919.00. (2006-2007).
- Wilhite, D. (Principal), et al; Harms, S. K. (Co- PI), USDA Risk Management Association Grant: Developing Drought Monitoring and Prediction Tools for the Continental U.S. using Data Mining Techniques, to UNL/UNK, $6.1 million, 3 years, Fall 2005 ($76,292 to UNK)
- Harms, S. K. (Principal), Goddard, S. (Principal), " *Knowledge Discovery Based on Geographical Regions,"* NSF Research Experiences for Undergraduates (REU), $14,050.00. (2004).
- Harms, S. K. (Principal), Goddard, S. (Principal), "*Knowledge Discovery: From Prototype to Decision Support,"* NSF REU, $14,050.00. (2003).
- Goddard, S. (Principal), Co-PIs: Reichenbach, S., Deogun, J., Hayes, M., Hubbard, K., Svoboda, M., Waltman, W., and Wilhite, D., Harms, S. K.(Supporting), "*Risk Assessment and Exposure Analysis on the Agricultural Landscape,"* USDA Risk Management Association (RMA), $1,326,623. ($6,000 to UNK) (2002-2005).
- Reichenbach, S. (Principal), Co-PIs: Deogun, J., Goddard, S., Hayes, M., Hubbard, K., Revesz, P., Waltman, W., Wilhite, D., " Harms, S. K. (Supporting), *A Geospatial Decision Support System for Drought Risk Management ,"* NSF Digital Government Initiative (DGI), $1,007,914 from NSF, $95,729 from CCIS and UNL cost share. (2001-2004).

DIRECTED STUDENT RESEARCH (Partial Listing)
- Lee, J., Creighton University undergraduate student (Nov 2024-present), *Using LLM Sentiment Analysis of User Experiences for Improved Product Analysis and Marketing,* 24-'25 Magis! Investigatio Research Award (MIRA), Creighton University.
- Lum, J., Creighton University undergraduate student (May 2024-present), *Creating a Tool for Sentiment Analysis of User Experiences (SAUX),* Creighton University CURAS Summer Research.
- Schaaf, C. U. Nebraska Omaha graduate student. (August 2022-present), *Quark: An Intelligent Adaptive Education Platform for Quantum Cybersecurity,* Nebraska Research Initiative Collaboration
- Kelley, C., &Weitl-Harms, S. (2023). *Tiktok as an emotional outlet for ICU nurses.* University of Nebraska at Kearney Student Research Day, (Poster), March 2023**.**
- Kelley, C. (2022-2023). "*Sentiment Analysis of Nurse TikTok Responses to Implementing Evidence Based Practices for Symptom Management and Prevention of Complications in the Intensive Care Unit (ICU),"* UNK Undergraduate Research Fellow (URF).

- Meyers, N. (2022-2023). "*Lloyd the Monkey3 Judgement Day,*" *meyer-games.itch.io/*, UNK URF.
- Meyers, N. (2021-2022). "*Nea Edem*," 2022 National Conference on Undergraduate Research (NCUR), 2022 UNK Student Research Day (SRD), *meyer-games.itch.io/*, UNK URF.
- Meyers, N. (2020-2021). "*Lloyd the Monkey 1 & 2 Postmortem*," *meyer-games.itch.io/*, 2021 NCUR, 2021 UNK SRD, UNK URF.
- Meyers, N. (2019-2020). "*Lloyd the Monkey2 Game Development*," *meyer-games.itch.io/*, 2020 UNK SRD; UNK URF.
- Sellers, A. (2019). "Impact of Drought on Crime and the Economy in Rural Nebraska," Independent Student Research, https://nebdrought.blogspot.com.
- Oliver, A. (2019). "Applications of Artificial Intelligence in Video Games," UNK URF.
- Jameson, B., Harms, S. K., Alavi, A. S. (2019) "Data Storage Architecture Comparison," Midwest Instructional Computing Symposium (MICS) 2019, Fargo, ND; UNK SRD; UNK URF.
- Dhungel, A. (2019). "Computer Security in Nepal," UNK URF.
- Jones. W. (2018). "Using Student Class Projects to Create Social Media Plans for Small Businesses," UNK SRD; UNK URF.
- Harper, S. (2018). "Recycle Findr: Locate a Recycle Bin Nearby," Consortium for Computing Sciences in Colleges: Central Plains Conference 2018, Maryville, MO.
- Gade, M. (2018). "Citizen Journalism: Asset or Annoyance," *International Conference on WWW/Internet* (ICWI2018) Conference Proceedings.
- Jones. W. (2017). "First Impressions of Social Media by Small Rural Organizations," UNK URF.
- Middleton, S. (2015). "Virtual Reality Motorcycle Racing Game," 5th Annual Central Nebraska Business Idea Contest Winner.
- Jones. W. (2017). "Implementing a Website for Social Media Projects," UNK URF.
- Harshbarger, D. (2016). "Stock Market Analysis with Machine Learning," Independent Research.
- Kinkade, Z., Halsted, K. (2015-2016). "Wildlife Biology Fieldwork App," Software.
- McConville, T. (2014). "Jeb: Java Enabled Butler," National Conference on Undergraduate Research (NCUR), Lexington, KY; UNK SRD; UNK URF.
- Bard, K. (2012). "User Assessment of Aviation Records Management System: System Features, Usefulness, and Ease of Use," NCUR, Ogden, UT; UNK SRD; UNK URF.
- Wilson, J. (2012). "Wind Turbine Data Analysis and Recovery Information System," NCUR, Ogden, UT; UNK SRD; UNK URF.
- Bard, K. (2011). "A Database Information System for Aviation Programs," NCUR, Ithica, NY; UNK SRD; UNK URF.
- Gewecke, N. (2010). "WeatherSeer: A Customizable Weather Radar App," NCUR, Missoula, MT, UNK SRD; UNK URF.
- Glatter, C. (2008). "Developing Drought Monitoring and Prediction Tools for the Continental U.S. using Data Mining Techniques," NCUR; UNK SRD; UNK URF.
- Glatter, C. (2007). "Investigation of Data Mining Techniques for Drought Monitoring and Prediction in the Great Plains," NCUR; UNK SRD; UNK URF.
- Martinez, J. (2006). "Creating a Decision Support System for Phenology Analysis," NCUR; UNK SRD; UNK URF.
- Martinez, J. (2005). "Data Mining Applied to Crop Life Cycle Management," NCUR; UNK SRD; UNK URF.
- Kommuri, S. (2005). "Study of Drought Effects on Vegetation Growth Using Decision Trees and Neural Networks," NCUR; UNK SRD; UNK URF.
- Culver, M. (2004). "Decision Tree Learning with Forward Checking," UNK Student Research Jrnl.
- Kommuri, S. (2004). "Drought Monitoring Using Decision Trees," NCUR; UNK SRD; UNK URF.
- Kozal, D., Culver, M. (2004). "A System Demo: Developing a Decision Support System for Drought

Assessment," NCUR; UNK SRD; UNK URF.
- Culver, M. (2004). "Controlling Resource Intensive Processes through Intelligent, Automated Computational Steering," NCUR; UNK SRD.
- Kozal, D., Culver, M. (2003). "Developing a Comprehensive Web-based Knowledge Discovery Decision Support System," NCUR; UNK SRD.

TEACHING EXPERIENCE

Creighton University (Fall 2023-Present)
- CSC 121: Computers and Scientific Thinking (3 credits), 7 courses.
- CSC 221: Introduction to Programming (3 credits), 2 courses.
- CSC 222: Object Oriented Programming (3 credits), 3 courses.
- CSC 321: Data Structures (3 credits), 2 courses.
- CSC 542: Database Design and Security (3 credits), 1 course.
- CSC 590: Special Topics: Computer Security (3 credits), 1 course.

University of Nebraska at Kearney (Fall 2001-Spring 2023)
- Database Systems, 24 courses. (Undergraduate/Graduate)
- Artificial Intelligence, 20 courses. (Undergraduate/Graduate)
- Object Oriented Programming, 16 courses.
- Intro to Computer Science (CS), 9 courses.
- Information Technology Teaching Methods, 11 courses. (Undergraduate/Graduate)
- Senior Capstone in IT and CS, 6 courses.
- Computers in Society, 5 courses.
- System Analysis and Design, 4 courses.
- E-commerce Information Systems, 4 courses. (Undergraduate/Graduate)
- Algorithms and Data Structures, 4 courses.
- Social Networking, 4 courses.
- Enterprise Web Application Development, 3 courses.
- IT Infrastructure, 3 courses.
- Information Systems Concepts, 3 courses.
- System Administration I, 1 course.
- Computer Security, 2 course. (Undergraduate/Graduate)
- Practicum in CS/IS; Directed Research in CS/IS, numerous courses.

UNL (Fall 1999-Spring 2001): Intro to CS (7 courses); Programming Language Concepts

Lincoln University (Fall 1993-Spring 1999): Data files and Databases; Information Engineering; Management Information Systems; CIS Communication Techniques; Information Center Functions; Systems Development Methodologies; Intro to Computer Science/CIS; Intro to Microcomputers; Intro to Business Applications for the Microcomputer; Computer Applications for Business; Intro to Business Programming: COBOL

Fort Hays State University (Spring 1990-Fall 1991): Information Structures; Database Management Systems; Programming Languages; Intro to Computer Information Systems

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HONORS AND AWARDS
- 2025 Creighton University JMC Awesome Innovation award.
- 2025 National Council on Undergraduate Research (CUR Math, Computing, and Statistics (MCS)

Division Advanced-Career Faculty Mentor Award, May 2025.
- Senior IEEE Member, April 2025.
- Strongest Network: Working Across Industry, Academia, and Education, NCWIT Aspirations in Computing, May 20, 2021.
- Division of the Year, Council on Undergraduate Research, June 28, 2019.
- Midwest Instructional Computing Symposium (MICS) Robotics Competition
  - First Place, Basketball, Faculty Advisor/Coach, 2019
  - Second Place, Basketball, Faculty Advisor/Coach, 2019.
  - First Place, Capture the Flag II, Faculty Advisor/Coach, 2018.
  - Third Place, Capture the Flag II, Faculty Advisor/Coach, 2018.
  - Third Place, Three Point Shooting, Faculty Advisor/Coach, 2015.
  - Third Place, Capture the Flag, Faculty Advisor/Coach, 2013.
- Albert Nelson Marquis Lifetime Achievement, Marquis Who's Who, November 5, 2019.
- UNK Faculty Development Fellowships with full pay, spring 2016, spring 2009.
- Faculty Appreciation, UNK Mortar Board Honor Society, November 9, 2016.
- Outstanding Volunteer, First Lego League of Nebraska, 2014.
- Marquis Who's Who in Industry Executives & Professionals, UNK, 2013.
- UNK Assessment Award for Exemplary Action Planning, UNK, 2009.
- UNK General Studies award for Assessment Planning, 2009.
- Dustin Kozal, Honorable Mention, Computing Research Association (CRA) Undergraduate Research Award, Faculty Mentor, 2004.
- Missouri Governor's Award for Excellence in Teaching, Lincoln University 1997.

SERVICE

Professional-level Service
- Invited Guest Editor, 2025, [Special Issue: Role of Artificial Intelligence in Natural Language Processing, Electronics journal](#).
- Council on Undergraduate Research (CUR) Math, Computer Science and Statistics Division Representative, 2017-Present.
- Chair CUR MCS Nominations Committee, 2019-Present.
- [AP Visiting Fellows in Assessment for AP Computer Science Principles,](#) 2024.
- External Reviewer, Rank and Tenure Review for Loyola Marymount University Computer Science Department, 2024.
- External Reviewer, Dakota State University, Master Level and Bachelor Level Computer Science Programs, Spring 2024.
- NCWIT Higher Education Academic Alliance, Creighton University Representative, 2023-Present.
- Technical Program Committee and Reviewer, 2024 IEEE Frontiers in Education Conference (FIE).
- Program committee of HELMeTO 2023 (International Conference on Higher Education Learning Methodologies and Technologies Online), Fall 2023.
- External MS Committee Member, University of Nebraska at Omaha, Chris Schaaf, MS student, 2023-present.
- Program Committee, 2024 23rd IEEE International Conference on Machine Learning and Applications (ICMLA), Miami, FL, December 18–20, 2024.
- Session Chair, 2024 23rd IEEE International Conference on Machine Learning and Applications (ICMLA), Miami, FL, December 18–20, 2024
- Technical Program Committee and Reviewer, IEEE Frontiers in Education Conference (FIE), 2022-Present.

- Session Chair, IEEE Frontiers in Education Conference (FIE), 2024.
- Reviewer, Hawaii International Conference on System Sciences, 2023- Present.
- Reviewer, Cogent Engineering Journal, Fall 2023- Present
- Technical Program Committee and Reviewer, IEEE Global Engineering Education Conference (EDUCON), 2023-present. *Provided blind peer-review of several papers each year for acceptance decision.*
- Reviewer, Soft Computing Journal, Springer Nature Publishing, 2024- Present.
- Program Committee and Reviewer, International Conference on Applied Computing Conference, 2008- Present.
- External Reviewer, Rank and Tenure Review for Kennesaw State University Computer Science Department, 2023

University-level Service
- NCWIT Higher Education Academic Alliance, Nebraska-SW Iowa Division, Creighton University
- University Assessment committee (2025- Present).
- Clare Boothe Luce Scholars selection committee (2023- Present).
- Creighton Renest volunteer, May 2024.
- Cybersecurity and AI Program in Continuing Education, *Member of exploration team*, (2004-2005).
- Master of Science in Health Informatics*, exploration for teaching opportunities and shared research discussions* (2023-present).
- Creighton Innovation & Technology Exchange (CITE), member (2025-present).

College-level Service
- Mission Catalyst committee (2024- Present).
- Ratio Studiorum Program (RSP) Faculty Advisory (2025-2026 incoming class).

Departmental-level Service
- CSDJ Department Assessment Coordinator (May 2024-Present).
- CSDJ Department Representative, New Student Days (March -April 2024).
- CSDJ CS Advisor (2024-present).
- Recommender *for numerous CSDJ students and alumni for awards, scholarships, and employment*.

Community Service
- **Casas Por Cristo** Missionary**,** San Raymundo, Guatemala (December 2025- January 2026).
- **Unbound Ministries** Trained Prayer Leader and Intercessor (August 2022-Present).
- **Lord Teach Me To Pray** Trained Facilitator (Jan 2017-Present).

Recent Service Prior To Creighton University (Partial Listing)
- Committed to CS/IT Applied Research: Editorial and Review Board, Intern. J. of Data Mining, Modeling and Management (IJDMMM), 2008 – 2022; Committee Member and Reviewer 7th & 8th International Conference on Data Mining and Applications (ICDMA); Program Committee Member and Reviewer, ACM Symposium on Applied Computing (ACM SAC): Data Mining track, 2003 – 2022; Reviewer, Neural Computing and Applications 2016-2023; Reviewer, IEEE Frontiers in Education Conference 2016, 2023; Reviewer, Int. J. of Continuing Engineering Education and Life-Long Learning 2019 – 2022; Reviewer, Earth and Space Science (2020-2023) Reviewer, Proceedings on Cybersecurity Education, Research and Practice (2022-2023); Reviewer Earth Sciences Research Journal (ESRJ) (2021-2022); Panelist NSF, 2017-2018.
- Committed to CS/IT education: NE Dept. of Education Communication and Information Systems Strategic Foresight Planning Team, 2015 – 2020; Session Chair, Midwest Instructional Computing

Symposium, (2016-2022); Chair, UNK CS Comprehensive Program ABET Accreditation. (2016-2020); code.org Nebraska Advisory Group, Lincoln, NE, 2018 - 2020; Chairperson, University of Detroit Mercy CS External Review, Detroit, MI. 2017; Chairperson, Dakota State University CS External Review, Madison, SD. 2016; Judge mobile application competition, Future Business Leaders of America (FBLA), Nebraska chapter, 2016 – 2023; Judge database design competition, FBLA, Nebraska chapter, 2022 – 2023; Judge, VEX Robotics, Kearney, NE. (2017); Judge, Nebraska Junior Academy of Science, Kearney, NE. (2014); UNK Robotics Competition Advisor, 2002-2023; coordinate CS/CSIT Advisory Council 2008-2020; Chair and presenter, UNK Tech Edge conference for K-12 educators, 2017-2023; created MOUs for graduate programs at UNL and K-State and 2+2 MOUs for CCC transfer students; Committee Chair, UNK Cyber Systems/CSIT Curriculum Committee. (2001-2019); coordinated the establishment and awarding of over $300,000 of endowed scholarships; provide outreach to K-12 students at events such as Cyber Camp, CoderDojos, Hour of Code, First Lego League Robotics Competitions, Girl Scout Events, IT Expos & Build a Computer Day, 2001-2023; etc.

- Committed to supporting academia: CBT/CNSS Council of Chairs 2007- 2019; UNL/UNK Engineering Program Advisory Council 2017-2022; Graduate Faculty (2004-2023); Assessment 2007-2023; General Studies Council 2008-2011; 2020-2023; Faculty Senate 2014-2017; Committee Member, UNK Cyber Systems/CSIT Advisory Council. (2008-2023); Committee Chair, UNK Cyber Systems/CSIT Scholarship Selection. (2012-2020); Faculty Advisor, UNK Cyber Systems/CSIT Department. (2002-2023); Committee Member, UNK CNSS Rank & Tenure Committee. (2009-2015); Committee Member, UNK Cyber Systems OTOL Building Replacement. (May2017-2020); UNK Coordinator, Computing Research Association Data Buddies Study, (2012-2020); UNK CS/CSIT newsletter author and editor 2007-2019; Manage, UNK Cyber Systems/CSIT Website. (2007-2020); Coordinator, UNK Cyber Systems/CSIT Public Student Project Presentations. (2011-2019); numerous media interviews and articles, etc.

- **Committed to supporting economic development in Nebraska:** Committee Member, Grow NE Steering Committee, Kearney, NE. (2016-2017). Chairperson, CSIT Outreach, Kearney, NE. (2013-2019); Coordinator, Business Open Houses for UNK Technology Programs. (2013-2019); Manager, UNK Cyber Systems/CSIT Student Job Website. (2008-2019); Coordinated CSIT Internships and Employment (2007-2019); co-host IT Career Fair Breakfasts, 2007-2019; Committee Chair, UNK Cyber Systems/CSIT Alumni Annual Meetings. (2015-2019); Committee Member, UNK Career Services Advisory Committee. (2011-2016); Committee Member/Chair, University of Nebraska Peter Kiewit Student Entrepreneurial Award and Walter Scott Entrepreneurial Business Award. (2004-2006); etc.

- **Committed to student experiential development:** 50+ local/regional student publications, 20+ national student publications, 30+ student internships, 50+ independent studies, 100+ student experiential learning projects, 20+ paid student researchers in various IT fields.

- **Committed to women in IT:** Program Coordinator, Nebraska & SW Iowa NCWIT Aspirations. (2015-2023); Volunteer, Nebraska Women in STEM (2022-2023); Panelist, Introduce a Girl to Engineering Day, Lincoln, Nebraska. (2020); Faculty Mentor, Missouri, Iowa, Nebraska Kansas Celebration of Women in Computing, 2011-2023; Faculty Mentor/Panelist, Rocky Mountain Celebration of Women in Computing, 2010-2023; Creator, UNK CSIT Female Recruiting and Retention Plans (2014-2019); Women Tech Educators Online Recruitment and Retention Training, Institute for Women in Trades Technology & Science (IWITTS), 2014, etc.

 Media Contributions (Partial Listing)
- **TV, Good Morning Nebraska,** Feb 14 2018, Sep 14 2017, Mar 2013, Feb 2013, Mar 2012, Mar 8 2010, April 5, 2010.
- **TV, 10/11**, Apr 10 2014.
- **TV, KHAS**, Apr 10 2014.

- **Newspaper**, **Kearney Hub,** Aug 20 2016, Aug 18 2016, May 26 2016, May 21 2016, Mar 26 2016, Nov 2015, Oct 2015, Apr 2015, Aug 24 2013, Aug 23 2013, Aug 2012, March 6 2012.
- **Newspaper, Grand Island Independent,** Mar 4 2016.
- **Radio, KGFW Talk of the Town,** Jan 30 2020, August 9 2016.
- **Online UNK News**, Feb 2020, Aug 2019, Feb 2019, Jun, 2018, Feb 2018, Aug 2016, May 2016, May 2016, Nov 2015, Oct 2015, Jul 2015, Apr 2015, Mar 2015, Jun 2014, May 2014, Aug, 2012.
- **Magazine, UNK Today**, Sept 2016.

PROFESSIONAL DEVELOPMENT

International Conferences
- IEEE ICMLA Conference, Miami, FL, December, 2024.
- IEEE Frontiers in Education Conference, Washington DC, October 2024.
- 18th International Technology, Education and Development Conference, March 4-6, 2024.

National Conferences/Trainings/Workshops
- Council on Undergraduate Research's Division Representative Training, May 2025.
- NCWIT Summit, May 2025.
- NCWIT Higher Ed Alliance Meeting, May 2025.
- Council on Undergraduate Research's Annual Leadership Meeting, 2017- 2025.
- ML/AI Applications in Biology and Medicine Conference, May 2, 2024.
- National Academy of Sciences AI for Scientific Discovery - A Workshop, Oct 12-13, 2023
- Collaborative Institutional Training Initiative (CITI Program) Certified Trainings Completed
  - Conflict of Interest Basic, Dec 29, 2023.
  - Conflict of Interest Stage 1, Dec 29, 2023.
  - Responsible Conduct of Research Course, Stage:2 - Refresher Course, Dec 29, 2023.
  - IRB - Social & Behavioral Faculty, Stage: 2 - Refresher Course, Dec 29, 2023.
  - Faculty, Stage 1, Dec 29, 2023.

Creighton-sponsored Professional Development
- Service learning, Aug 6, 2025
- Creighton University RSP Advisor Training, May 2025.
- The Nuts and Bolts of Teaching Sustainability in the Classroom, May 2025.
- Creighton University Institute for Population Health faculty development course on Human-Centered Design, Spring 2025.
- Newcomers Orientations Valuing Ignatian and Creighton Engagement (NOVICE) Program, sponsored by the Division for Mission and Ministry, Completed 2023-2024.
- College of Arts and Sciences New Faculty Luncheon Series, Sept 2023-April 2024.
- New Faculty Orientation Seminar Series, July 2023-April 2024.
- BlueLine Generative AI Tools Group, 2023-present.
- University Committee on Rank and Tenure Rank and Tenure Forum, Nov 10, 2023.
- Center for Faculty Excellence trainings completed:
  - Faculty and Staff Annual Compliance Training, January 2025
  - Drug Free Schools and Communities Act 2024, February 22, 2024
  - ResearchWorks: Creighton's New Research Platform**,** Application & Questions, Oct. 31, 2023.
  - Creighton Internal Grant Funding Opportunities, Oct 3, 2023.
  - SciENcv: Creating Your NIH & NSF Biosketches, Sep 21, 2023.
  - Lowering Student Anxiety Levels in Your Classroom, Sep 13, 2023.
  - AI: Demystifying Generative AI's Impact on the University, Sep 8, 2023.
  - FERPA Compliance Training for Creighton-Connect Users, August 22, 2023.
  - Title IX Training (GI), August 2023.

- o   Child Abuse Prevention | Protecting Minors for NE,), August 2023.
- o   Standards of Ethical Conduct,), August 2023.
- o   Drug Free Schools and Communities Act 2022-2023, August 2023.

Recent Previous Professional Development Activities Prior to Creighton University
- Hawaii International Conference on System Sciences (HICSS-56), Maui, HI, Jan 3-7, 2023.
- Colloquium on Information Systems Security Education (CISSE), (virtual), November 2022.
- Conference on Cybersecurity Education, Research and Practice (CCERP), (virtual), November 2022.
- IEEE Frontiers in Education, October 2022.
- IEEE 10th International Conference on Information and Education Technology (ICIET 2022), (virtual) Matsue, Japan, April 9-11, 2022.
- 53rd ACM Technical Symposium on Computer Science Education (ACM SIGCSE), (virtual) Providence, Rhode Island, March 2022.
- IEEE Frontiers in Education, 2021.
- Grace Hopper Celebration, 2021.
- CITI Human Research - IRB - Social & Behavioral Faculty, Basic Course (Renewal), Jan 12, 2021.
- Certificate, Fundamentals of Deep Learning for Computer Vision, Nvidia Deep Learning Institute, 2020.
- UNK Tech Edge Conference for teachers, Kearney, NE, 2020, 2019, 2018, 2017.
- Women in Cyber Security Annual Conference, Virtual, 2020-2023.
- Council on Undergraduate Research Annual Business Meetings, 2017-2023.
- UNK Tech Edge Conference for teachers," Kearney, Nebraska. 2017-2022.
- Missouri, Iowa, Nebraska Kansas Celebration of Women in Computing, 2011-2022.
- BMIT Standards Workshop, Nebraska Department of Education, 2019.
- NDE Teacher Educator Forum," Nebraska Department of Education, Lincoln, NE. 2016-2020.
- 2019 ABET Workshop, ABET, Baltimore, MD, July 2019.
- Collaborative Institutional Training Initiative (CITI) Export Compliance Faculty Stage 1 (ID 181913), May 10, 2019.
- ABET Self-Study Report Development Workshop, Dallas, TX, April 2019.
- CITI Human Research - IRB - Social & Behavioral Faculty (ID 5704), Refresher Course, Jan 19, 2018.
- Computer Science Teachers Association, CSTA, Omaha, NE, 2018.
- Nebraska Career Education Conference, NDE, Kearney, NE, 2019, 2018, 2017, 2016.
- Midwest Instructional Computing Symposium Conferences, 2010-2020; except one.
- Fall Ed Tech Conference, NDE, Kearney, NE, 2019, 2018, 2017.
- Undergraduate Research Collaborations Conference, CUR, 2019, 2017.
- IT Leadership Conference: "Opportunity that Scales: Women Advancing the Future of Information Technology in Higher Education, University of Nebraska, Lincoln, NE, 2017, 2016, 2015.
- Rocky Mountain Celebration of Women in Computing, 2010-2020; except one.

PROFESSIONAL MEMBERSHIPS
- Alphi Chi, Iowa Epsilon Chapter, Buena Vista College, 1986-Present.
- Anita Borg, 2020-Present.
- Association for Computing Machinery (ACM), 1999-2011;2017-Present.
- ACM-Women, 2017-Present.
- Computer Science Teachers Association, 2019-Present.
- Council on Undergraduate Research, Math/CS Councilor, 2017-Present.
- Healthcare Information and Management Systems Society (HIMSS), 2023-Present
- IEEE, July 2021- Present; July 2016 – 2017.
- IEEE Women In Engineering (WIE), 2023- Present.

- SYSters, 1999-Present.

Technical Skills

- Numerous programming languages including Java, Python, C++, SQL, C, C#, HTML5, CSS, COBOL, RPG, PHP, PL1, Lisp, Robot-C, Thunkable, Scratch, App Inventor, etc.
- Several database management systems(DMS) including MySQL, AWS DynamoDB, Oracle, DB2, SQL Server, MongoDB, Hadoop, etc.
- 30 years of DBMS experience with database modeling, ensuring referential integrity, query optimization, installation, monitoring, PL/SQL, triggers, stored procedures
- Several ML Frameworks including Nvidia Deep Learning, Google Colab, sklearn, Weka, TensorFlow
- Several Platforms and Frameworks including IntelliJ, Eclipse, Git, Android Studio, Google Cloud, AWS, GitHub, GitLab, etc.
- Numerous project management and software development methodologies
- Numerous operating systems: Windows, Linux, MacOS, Unix, Android, NXT/EV3, ioS, etc.
- Numerous security, network and system administration tools: Wireshark, IDS, Firewalls, Honeypots, Open SSH, Password Cracking, DNSSEC, WSUS, SNMP, Data Encryption, etc.
- IT Management: developing policies, purchasing, hiring, scheduling, project management, etc.