Morgan Diederich

morgandiederich@gmail.com | (859) 539- 0315 | linkedin.com/in/morganawd/

Professional Experience

Senior Learning Analyst, Western Governors University | May 2021 - October 2022
Research Assistant/ Analyst, Utah State University | October 2017 - May 2021|October 2022+
Instructional Designer, Bridgerland Technical College | May 2020 - August 2020
Model Risk Management Intern, Zions Bancorporation | May 2018 - August 2019
Business Intelligence Consultant, BI Group (USU) | Aug 2017 - May 2019
Category Manager Co-op, Valvoline inc, May 2017-August 2018

Teaching

Data Visualization (Instructional Technology and Learning Sciences (ITLS 4130), USU, *Fall 2021,2022, 2023*
    Topics taught: Tableau; data literacy for non-data students; data cleaning and wrangling

Virtual Environment Development *(*ITLS 4210/6210), USU, *Summer 2023, 2024*
    Topics taught: Unity; C# (light); AI for coding help

Teaching Assistant, Project Management (ITLS 6560)**,** USU**,** *Spring 2020, 2021, 2022*
Teaching Assistant, Instructional Design I (ITLS 6520), USU, *Spring 2021*
Teaching Assistant, Management of Database Systems (MIS 6230), USU, *Fall 2018*
Teaching Assistant, Database Implementation (MIS 4330), USU, *Spring 2018*

Education

Ph.D. (Doctoral Candidate; ABD) in Instructional Technology and Learning Sciences | in progress
Instructional Technology and Learning Sciences, Utah State University (USU)
Dissertation: The Impact of Immersive Technologies on Science Education

M.M.I.S. Masters of Management Information Systems | 2019
John M. Huntsman School of Business, Utah State University (USU)

B.S. in Statistics | 2017
College of Science, Eastern Kentucky University (EKU)
Minors: Actuary Science, Honors Program, Mathematics, Psychology

Last updated 3/25/2024

Honors thesis: Understanding the Voices of Elementary Students With and Without Specific Learning Disabilities

Peer Reviewed Journal Articles

Nguyen, H., & **Diederich, M.** (2023). Facilitating knowledge construction in informal learning: A study of TikTok scientific, educational videos. *Computers & Education*, *205*, 104896. https://doi.org/10.1016/j.compedu.2023.104896

Kang, J., **Diederich, M.**, Lindgren, R., & Junokas, M. (2021). Gesture Patterns and Learning in an Embodied XR Science Simulation. *Educational Technology & Society*, *24*(2), 77–92. https://www.jstor.org/stable/27004933

Peer Reviewed ACM Proceedings

Nguyen, H., & **Diederich, M.** (2023). How Civil are Comments on TikTok's Educational Videos? Insights for Learning at Scale. *Proceedings of the Tenth ACM Conference on Learning @ Scale*, 292–296. https://doi.org/10.1145/3573051.3596174

Diederich, M., Kang, J., Kim, T., & Lindgren, R. (2021). Developing an In-Application Shared View Metric to Capture Collaborative Learning in a Multi-Platform Astronomy Simulation. *LAK21: 11th International Learning Analytics and Knowledge Conference*, 173–183. https://doi.org/10.1145/3448139.3448156

Conferences

Diederich, M. & Nguyen, H. (2024). Facilitating Data Conversations with Generative AI. *Proceedings of the 2024 International Conference of the Learning Sciences.* 2024 ISLS Annual Meeting.

Diederich, M. & Nguyen, H. (2024). Exploring Critical and Conceptual Data Literacy in Upper Elementary School. *Proceedings of the 2024 International Conference of the Learning Sciences.* 2024 ISLS Annual Meeting.

Nguyen, H., **Diederich, M.,** & Roth, L. (2024). Designing Conversation Cards to Support Critical Data Literacy. *Proceedings of the 2024 AERA Annual Meeting.* 2024 AERA Annual Meeting.

Diederich, M., Kang, J., Lindgren, R. (2022). Networks of Behavior in Virtual Astronomy Tasks: An Epistemic Network Analysis. *Proceedings of the 2022 AERA Annual Meeting*. 2022 AERA Annual Meeting. https://doi.org/10.3102/1889250

Kang, J., Na, C., **Diederich, M**., Yan, L., & Swanson, H. (2021). Examining Current Data Practices in Science Education: A Systematic Review. *American Educational Research Association*. Online Conference. *Round table presentation.*

Lefler, M., **Diederich, M**., & Hveem, J. (2021). Determining Effectiveness Between Various Rural Dual-Enrollment Career and Technical Education Courses Based Upon Time and Location. *American Educational Research Association*. Online Conference. *Paper presentation*

Wood, M. A., & Kim, Y. S. (2019). Pro-Suicide vs. Suicide Prevention Communities: An IT Perspective on Public Health. *AMCIS 2019 Proceedings*. Twenty-fifth Americas Conference on Information Systems, Cancun.

Wood, M. A., & Kim, Y. S. (2018). Validating Hollywood Golden Rules: A Preliminary Study. *AMCIS 2018 Proceedings*. Twenty-forth Americas Conference on Information Systems, New Orleans, LA.

Cheng, J., **Wood, M. A**., Zhang, X. (2017). Analytics to Unravel Consumer Choice. Annual Meeting of Association for Information Systems Student Chapter Leadership Conference. Dallas, Texas. *Paper presentation.*

Wood, M. A. (2017). Diving into disability: Understanding the voices of elementary students with and without specific learning disabilities. Annual Regional Meeting of the Southern Regional Honors Conference. Ashville, North Carolina. Presented at the state conference as well. Paper presentation.

Wood, M.A., et al (2017). A roundtable discussion of student honors' leadership in the region. Annual Regional Meeting of the Southern Regional Honors Conference. Ashville, North Carolina

Wood, M.A. (2017). An Analysis of Current and Prospective Eastern Kentucky University Honors Students. Annual Regional Meeting of the Southern Regional Honors Conference. Ashville, North Carolina.

Hatchey, D., Graham, H, **Wood, M.A.** (2016). Service and self: Honors director and student perspectives on a "culture of service" in honors program identity. Annual Meeting of the National Collegiate Honors Council Annual Conference. Seattle, Washington

Wood, M. A. (2015). Collegiate contributions: A content analysis of NCHC student posters from 2008 to 2014. Annual Meeting of the National Collegiate Honors Council Annual Conference. Chicago, Illinois.

Wood. M. A. & Kelley, C. M. (2015). Making no little plans for service learning: The South Carolina Lowcountry as a "live classroom" for EKU Honors students. Annual Meeting of the National Collegiate Honors Council Annual Conference. Chicago, Illinois

Book Chapters

Wagner, T., & **Diederich, M.** (2022). Scalable Personalization for Student Success: A Framework for Using Machine Learning Methods in Self-Directed Online Courses. In G. Trajkovski, M. Demeter, & H. Hayes (Eds.), *Advances in Educational Technologies and Instructional Design* (pp. 94–112). IGI Global. https://doi.org/10.4018/978-1-7998-9644-9.ch005

Kang, J., Moon, J., & **Diederich, M.** (2019). Educational Games and Gamification: From Foundations to Applications of Data Analytics. In A. Tlili & M. Chang (Eds.), *Data Analytics Approaches in Educational Games and Gamification Systems* (pp. 3–23). Springer Singapore. https://doi.org/10.1007/978-981-32-9335-9_1

Leadership

Doctoral VP, Instructional Technology Student Associations,USU, 2020-2021
Co-President/ Group lead/ Student Consultant, Business Intelligence Group, USU, 2017-2019
Corporate Outreach Coordinator, Association of Information Systems, USU, 2017-2019
President/ Vice President, Honors Student Advisory Council, EKU, 2014-2017

Academic Service

Assisted in manuscript review for the American Educational Research Association, 2020
Welcome team for the Utah Conference for Undergraduate Research, 2019
Faculty and department chair nominated board member, College of Sciences
Dean's Advisory Board, Eastern Kentucky University, 2016-2017
Honors Advisory Committee, Eastern Kentucky University, 2016- 2017
Faculty selected board member, Chautauqua Planning Board, Eastern Kentucky University, 2016-2017

Awards

Graduate Researcher of the Year, Jon M. Huntsman School of Business, USU, 2019
Graduate Researcher of the Year, Department of Management Information Systems, 2019
X-Stem Research Assistantship, USU, 2017, 2018
Best Student Leadership Chapter, Nationally recognized AIS student chapter leadership conference, 2019
Hands on Expertise Award, Valvoline Motor Oil, 2017
Honors Scholar, Eastern Kentucky University, 2017

Other Research, Contract, and Consulting Experience

Lenovo, Inc., USU, Aug 2017-May 2018
Academic and Instructional Services Analysis Consulting, USU, Aug 2017- Dec 2017
Predicting Diabetes Re-admits, USU, Aug 2017- Nov 2017
Music Lyrics Data Mining, USU, Nov 2017-Dec 2017
Statistics Consulting Lab, University of Kentucky, Aug 2016 - Jan 2017
Understanding University Student Organization Purchases, EKU, Jan 2017- May 2017
Political Science Data Entry, EKU, Jan 2015 - May 2015
Government Data Entry, EKU, Oct 2014