

Mika Morgan, Ph.D.

Assistant Professor, Graduate Coordinator
Department of Computer Science
Midwestern State University
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EDUCATION

Doctor of Philosophy in Computer Science and Engineering <i>University of North Texas, Denton, TX (GPA 4.0)</i>	Dec. 2025
Master of Science in Computer Science <i>Midwestern State University, Wichita Falls, TX (GPA 4.0)</i>	Aug. 2021
Master of Education in Educational Leadership <i>Midwestern State University, Wichita Falls, TX (GPA 4.0)</i>	Dec. 2011
Bachelor of Arts in Interdisciplinary Studies <i>Midwestern State University, Wichita Falls, TX (GPA 3.7)</i>	Dec. 2009

TEACHING EXPERIENCE

Midwestern State University <i>Assistant Professor, Computer Science</i>	Jan. 2026 - Present
<i>Instructor, Computer Science</i>	Sep. 2021 - Dec. 2025

Courses Taught

- Taught over 1,100 students across 43 undergraduate and graduate courses
- Introductory: CMPS 1013 (online)
- Core: CMPS 1023 (online), CMPS 1044 (with lab), CMPS 1063
- Upper-level/ Graduate: CMPS 4553, CMPS 5383, CMPS 5443, CMPS 6903

Course Development & Curriculum Design

- Developed CMPS 6903: Research Methods (full course design, including research projects)
- Developed CMPS 5443: Natural Language Processing (full course design, including programming samples and assignments)
- Redesigned all course material for ADA compliance and accessibility in CMPS 1013, 1023, 1044 (including lab), and 4991
- Updated course content, lecture videos, and assessments across multiple core courses
- Created structured D2L rubrics to improve grading clarity and consistency
- Designed auto-graded homework assignments in CMPS 1044 to provide immediate feedback

Teaching Innovation & Pedagogy

- Developed *Glide*, a novel online Python IDE designed to support novice programmers; CMPS 1023 students using *Glide* outperformed peers on 7 out of 9 assessments
- Created weekly code reviews to reinforce new concepts in CMPS 1044 through spiraling review
- Integrated interactive lecture tools (Slido) to assess real-time student understanding in an anonymous way and increase student engagement with lectures
- Developed strategies to mitigate AI misuse in programming assignments in CMPS 4883 (2026 Teaching Grant proposal submitted)

Student Support & Engagement

- Averaged 10 weekly office hours, with over 100 student visits per semester
- Led Programming Club (1-2 meetings/week, ~8–12 students/session), facilitating hands-on coding practice and collaborative problem-solving to reinforce and expand lecture content
- Supported students through letters of recommendation for internships, scholarships, graduate programs, and awards, contributing to successful student placements
- Consistently received excellent student evaluation scores across courses and semesters, with strong ratings in clarity, organization, and instructor support

Archer City High School

STEM Teacher

Aug. 2011 - May 2021

- Designed and taught courses in computer science, robotics, and pre-calculus
- AP Computer Science A and AP Computer Science Principles teacher
- UIL Computer Science coach for six years: district champions 6 years, regional champions 4 years
- UIL Robotics coach for two years: State qualifiers (2018)
- UIL Film Festival coach: State qualifiers (2014)
- TCEA 3D Design coach: State Champions (2017)

University of Texas at Austin

We Teach CS Advisory Board

Jan. 2016 - Dec. 2016

- Served as one of ten members on the TeachCS Advisory Board with the Center for STEM Education at the University of Texas at Austin
- Created and tested an online EdX course to help prepare teachers to pass the computer science certification exam, with a goal of expanding computer science education in Texas high schools
- Specific focus on recursion, algorithms, and Big O complexity

RESEARCH EXPERIENCE

Research ORD-ID: 0009-0004-6738-9011

Publications: Journal Articles

- **Morgan, M.**, Ludi, S., Johnson, T. (2026). *GLIDE: Developing a Usability-Driven Programming Environment for Novices*. Journal of Computing Sciences in Colleges, 41(7). (accepted, will be published in May)
- Makkena, S., Mallu, G., Poka, N., & **Morgan, M.** (2025). *Enhancing blue-collar jobs: Development of a location-based mobile job portal for repair services*. Journal of Computing Sciences in Colleges, 40(7), 42–49.

Publications: Refereed Conference Papers

- **Morgan, M.**, Ludi, S., Boddu, V., & Patibanda, K. (2025). *Prioritizing usability in programming environments for children*. CHIItaly 2025: 16th Biannual Conference of the Italian SIGCHI Chapter. <https://doi.org/10.1145/3750069.3750075>
- **Morgan, M.**, Ludi, S., Gash, K., & Truong, T. (2024). *Investigating the usability and critical features of coding applications for children: Insights from teacher interviews*. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Liverpool, UK.
- **Morgan, M.**, Ludi, S., Cook, L., & Warren, A. (2023). *Impact of usability heuristics on user satisfaction among coding apps for children*. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Washington, DC, USA.

Poster Presentations

- **Morgan, M.** (2024). *Usability of coding applications for children: Insights from teacher interviews*. UNT Computer Science & Engineering Research & Design Expo.
- **Morgan, M.** (2023). *Impact of usability heuristics on user satisfaction among coding apps for children*. UNT Computer Science & Engineering Research Labs Open House.
- Marchesi, V., & **Morgan, M.** (2022). *A sentiment analysis over vaccines on social media*. 19th Undergraduate Research and Creative Activity Forum, Midwestern State University .
 - 1st Place MCOSME Poster Award

Conference Presentations

- **Morgan, M.**, Ludi, S., Johnson, T. (2026). *GLIDE: Developing a Usability-Driven Programming Environment for Novices*. Journal of Computing Sciences in Colleges, 41(7). (accepted, will be published in May)
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features of coding applications for children: Insights from teacher interviews. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Liverpool, UK.

- **Morgan, M.**, Ludi, S., Cook, L., & Warren, A. (2023). *Impact of usability heuristics on user satisfaction among coding apps for children.* IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Washington, DC, USA.

Student Mentorship: Graduate Thesis Committees

- Rahimi, M., Stringfellow, C., Johnson, T., **Morgan, M.** (2025). *Remaining Agile with Hybrid Work Models.*
- Soma, A., Colmenares, E., **Morgan, M.**, Roychoudhuri, L. (2025). **Paper Name.**
- Mathers, G., Griffin, T., Stringfellow, C., **Morgan, M.** (2024). *LiveTest: Open-Source, OMR Testing Software.*
- Pulliam, K., Griffin, T., Stringfellow, C., **Morgan, M.** (2024). *Generating Synthetic Datasets to Improve Deep Learning Model Training.*

Student Mentorship: North Texas Area Student Conference Oral Presentations

- Taylor, A., **Morgan, M.**, (2026). *Adversarial Machine Learning in Cybersecurity: How AI Systems Are Attacked and Defended.*
- Gonzales, F., **Morgan, M.**, (2026). *AI-Enhanced Phishing Attacks: How Generative AI is Increasing Social Engineering Success Rates.*
- Crawford, R., **Morgan, M.**, (2026). *Biometric Security: Is Your Data Safe?*
- Taylor, A., **Morgan, M.**, (2026). *Adversarial Machine Learning in Cybersecurity: How AI Systems Are Attacked and Defended.*
- Dela Cruz, A., **Morgan, M.**, (2026). *Accidental Accelerators: Why GPUs Dominate AI Today and How Specialized Chips Are Impacting Them.*
- Salyers, R., **Morgan, M.**, (2026). *Approaching the Limits of Computing: Physical, Architectural, and Theoretical Restraints.*
- Wang, J., **Morgan, M.**, (2026). *RAM Shortage and the Ramifications That Follow.*
- Hulathduwage, I., **Morgan, M.**, (2026). *Neural Networks at the Speed of Light: When Physics Performs Computation.*
- Ricketts, R., **Morgan, M.**, (2026). *Crunch Culture: Its Effects on the Quality of Video Game Programming and Development.*
- King, J., **Morgan, M.**, (2026). *Entity-Component-System Architecture: Improving Performance in Game Development.*
- Odjewuyi, J., **Morgan, M.**, (2026). *When Microseconds Matter: Designing Reliable Real-Time Software in C++.*
- Norstrom, S., **Morgan, M.**, (2026). *Accessible Computing: Designing Technology for a Diverse Population.*
- Lawler, J., **Morgan, M.**, (2026). *Player Pianos: Generative AI and Art.*
- Kangethe, K., **Morgan, M.**, (2026). *AI Voice Cloning and Deep Fake Audio Detection.*
- Ajuwon, E., **Morgan, M.**, (2026). *Hidden in Plain Sight: Deep Learning Methods for Digital Steganalysis.*
- Cooray, H., **Morgan, M.**, (2026). *Differential Privacy: Protecting Personal Data in the Age of Big Data.*
- Tsui, J., **Morgan, M.**, (2026). *Can Sensitive Data Be Reconstructed from Trained Models?*
- Espino, J., **Morgan, M.**, (2026). *Quantum Key Distribution - The Unhackable Encryption.*

- Dillion, Z., **Morgan, M.**, (2026). *Artificial Intelligence in Action Sports: The Future of Judging and Analysis.*
- Polanco, C., **Morgan, M.**, (2026). *Data Analysis and Machine Learning in Soccer: Team Preparations.*
- Astudillo, C., **Morgan, M.**, (2026). *Data Analysis in Golf: Improving Equipment and Strategy.*
- Prospere, M., **Morgan, M.**, (2026). *Real-Time Human Pose Estimation for Injury Prevention and Sports Analytics.*
- Marquez, J., **Morgan, M.**, (2026). *LLM Code Assistants in Real Teams: Productivity Gains vs. Bugs and Security Risks.*
- Mathews, R., **Morgan, M.**, (2026). *Full-Stack Application Design: Building Systems with Angular, APIs, and Databases.*
- Garcia, K., **Morgan, M.**, (2026). *IIoT and AI Integration in Railways: Improving Efficiency and Predictive Maintenance.*
- Lobo, A., **Morgan, M.**, (2026). *The Invisible Backdoor: How Software Supply Chains Became a New Attack Surface.*
- Lang, T., **Morgan, M.**, (2026). *How the Internet Actually Delivers a Web Page.*
- Adhikari, S., **Morgan, M.**, (2026). *When Machines Invent Molecules: Deep Learning in Drug Discovery.*
- Gacovicaj, G., **Morgan, M.**, (2026). *Agentic AI: Systems That Act, Not Just Respond.*
- Corrales, I., **Morgan, M.**, (2026). *Flock Safety Surveillance: Trading Community Safety for Mass Surveillance?*
- Mitchell, B., **Morgan, M.**, (2024). *BERT and VADER for Sentiment Analysis of Dallas-Fort Worth (DFW) Sports Teams.*
- Marchesi, V., **Morgan, M.**, (2023). *A sentiment analysis over vaccines on social media.*

SERVICE

Professional Service

Consortium for Computing Sciences in Colleges (CCSC) 2024 - Present

South-Central Region

- South-Central Representative, CCSC National Board
- ConfOps Regional Chair (ConfTool, conference management, budgeting)
- Conference Steering Committee Member
- Paper Reviewer (South-Central and Mid-South regions; 14 papers total)
- Session Moderator (2026)
- Regional Editor, *Journal of Computing Sciences in Colleges* (2025)
- Regional Interim Treasurer (2025)
- Student Poster Competition Judge (2025)

University & College Service

Teaching and Learning Resource Collaborative, MCOSME Representative 2022 - Present

- Created QR codes and Automate workflow to generate and email participation certificates
- Attended monthly planning meetings and monthly events, helping with food and cleaning
- October 2023 workshop Facilitator and Guest Speaker
 - "Empowering Educators: Navigating AI in the Classroom"

Outstanding Student Award Committee 2026 - Present

- Evaluated 32 nominee statements to assist in selecting Outstanding Students in four categories

Faculty mentor for Geoscience instructor 2024 - 2025

Guest speaker for the Moffett Library's podcast, "Moffett Talks" 2024

Bolin Renovation Furniture Committee 2023 - 2024

Math, Science, & U Girl's Conference volunteer 2021

Department Service

- Faculty Advisor for 14-25 undergraduate computer science majors each semester
- Computer Science Scholarship Committee
- Outstanding Student Nomination Committee
- Computer Science Faculty Search Committee (2024)
- Completed multiple department and core assessment reports for CMPS 1023, 1044, 1063, and 4991 across multiple semesters
- Supported the North Texas Area Student Conference, including recruiting and scheduling volunteers, presentation evaluations, and event logistics
- Volunteered for recruitment and outreach events, including Mustang's Rally, Freshman Orientation, Tech for Teens, YES! Engineering Camp, and campus visits
- Proctored proficiency and exit exams (CMPS 1013, 1044, 1063, 4883) across multiple semesters
- Assisted with UPE induction ceremonies and awards events
- Delivered review sessions for the ETS Computer Science Exit Exam

HONORS & AWARDS

Outstanding Service to the CCSC South Central Region	2026
Nominated for MCOSME Excellence in Teaching Award	2023, 2025, 2026
Favorite Computer Science Professor Award (student-voted)	2025, 2026
Outstanding Graduate Woman at Midwestern State University	2021
Outstanding Graduate Woman in Computer Science	2020
Marzano High Reliability Schools Lead Teacher Team	2019
Society for Science's High School Research Teacher	2015

PROFESSIONAL DEVELOPMENT

Attended over 20 TLRC workshops related to pedagogy and supporting students <i>Midwestern State University</i>	2021 - Present
Technical Symposium on Computer Science Education <i>Association for Computing Machinery</i>	Feb. 2025
UR2PhD Graduate Student Mentor Training Program <i>Computing Research Association</i>	Aug. - Dec. 2023
New England Future Faculty Workshop <i>Northeastern University</i>	June 2023
COPLAC Summer Institute: Women Faculty in STEM <i>COPLAC Advance Plan</i>	June 2022

PROFESSIONAL MEMBERSHIPS

Institute of Electrical and Electronics Engineers	2022 - Present
Golden Key International Honor Society	2021 - Present
Upsilon Pi Epsilon International Honor Society	2021 - Present
Association for Computing Machinery	2019 - Present