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## EDUCATION

<b>Doctor of Philosophy in Industrial &amp; Systems Engineering</b> <i>Samuel Ginn College of Engineering, Auburn University, Auburn, Alabama</i> <ul style="list-style-type: none"><li>National Institute for Occupational Safety and Health (NIOSH) Fellow</li><li>Specializing in occupational safety, human factors, reliability, ergonomics, systems, and ergonomics. Advisor: Dr. Richard Sesek</li><li>Dissertation on quantifying the effects of technology on neurodiverse manufacturing workers.</li></ul>	2024
<b>Master of Science in Industrial &amp; Systems Engineering</b> <i>Samuel Ginn College of Engineering, Auburn University, Auburn, Alabama</i> <ul style="list-style-type: none"><li>Specific coursework in human factors, reliability, systems safety, advanced safety, slips, trips, and falls prevention, biomechanics, ergonomics, systems engineering, Lean systems, Six Sigma, manufacturing process improvement, and linear programming.</li></ul>	2023
<b>Graduate Certificate in Occupational Safety and Ergonomics</b> <i>Samuel Ginn College of Engineering, Auburn University, Auburn, Alabama</i>	2023
<b>Post-Graduate Teacher Certification</b> <i>Hardin-Simmons University, Abilene, Texas</i> <ul style="list-style-type: none"><li>Certified and trained in secondary chemistry and mathematics education, grades 6-12, specializing in twice-exceptional students - gifted education and learning disabilities.</li></ul>	2002
<b>Master of Science in Civil and Environmental Engineering</b> <i>University of Washington, Seattle, Washington</i> <ul style="list-style-type: none"><li>Specializing in environmental engineering with water resources management, water quality, risk assessment, and systems engineering</li><li>Masters project on Devil's Lake, North Dakota—gaming simulation and risk communication implemented in a class of forty college sophomores, Advisor: Dr. Richard Palmer</li></ul>	1998
<b>Bachelor of Science in Chemical Engineering</b> <i>University of Washington, Seattle, Washington</i> <ul style="list-style-type: none"><li>Specializing in environmental, systems, and biotechnology engineering. Capstone project partnered with Boeing for a part design used in Boeing 757 overhead compartments.</li></ul>	1997

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## LICENSES, AUTHORIZATIONS, AND CERTIFICATIONS

<b>Professional Engineer License (AL PE53572)</b>	2024-current
<b>Board Certified Safety Professionals (BCSP):</b> <b>Certified Safety Professional (CSP-47643)</b> <b>Associate Safety Professional (ASP- 40247)</b>	2025-current
<b>Occupational Safety and Health Administration:</b> <b>Trainer Course in OSH Standards for General Industry – OSHA 501 #35-0079915</b> <b>Standards for General Industry- OSHA 511 #SS-2411-SHO511-10</b> <b>Standards for Construction- OSHA 510 #SS-2410-SHO510-08</b>	2024-current
<b>Walkway Auditor Certificate Holder (WACH) (#00270)</b> <i>National Flooring Safety Institute (NFSI), Hurst, Texas</i>	2024-current
<b>Board of Certification in Professional Ergonomics (BCPE):</b> <b>Associate Human Factors Professional (AFHP)</b>	2024-current
<b>Texas and Alabama Secondary Math and Chemistry Teacher Licenses</b>	2002-current
<b>Lean Six Sigma Green Belt</b> <i>Samuel Ginn College of Engineering, Auburn University, Auburn, Alabama</i>	2021



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## RESEARCH EXPERIENCE

**Tiger Motors Research advised by Dr. Richard Sesek, Dr. John Evans, Dr. Greg Purdy** 2022-2024  
*Samuel Ginn College of Engineering, Auburn University, Auburn, Alabama*

- Collaborating with a team of three researchers in three investigations related to I4.0 technology, Lean, Neurodiversity, Human Factors, and Augmented Reality in manufacturing work environments.
- Independently exploring how technology influences the mental workload, learning experiences, and overall well-being of workers, especially when those workers fall within the neurodivergent spectrum. This crucial intersection of human factors, cognitive ergonomics, worker safety, and advanced manufacturing has remained relatively uncharted territory in the research landscape.

**Research Assistant for Dr. Richard Palmer** 1997-1998  
*University of Washington, Seattle, Washington*

- Collaborated in modeling the Devil's Lake watershed and addressing issues related to communicating water scarcity to the local population.

**Boeing Systems Engineering Researcher under Dr. Brian Mar** 1997-1998  
*University of Washington, Seattle, Washington*

- Collaborated with Dr. Brian Mar, a founding member of INCOSE (International Council on Systems Engineering), as a research assistant under his Boeing Systems Engineering Grant.

**Research Assistant for Dr. David Stensel** 1996-1998  
*University of Washington, Seattle, Washington*

- Mentored by Dr. David Stensel, Part of the team that developed what is now the globally preferred method of anaerobic bacterial digestion for sewage treatment facilities.

**Laboratory Researcher/Process Engineer** 1996  
*Penford Products, Cedar Rapids, Iowa*

- Developed and implemented a comprehensive calibration protocol for the moisture analyzers used in the starch plant's laboratory. Efforts not only increased the accuracy and precision of testing results but also had a positive impact on the entire plant's quality control measures.

**NASA Space Grant Summer Research with Dr. G.G. Allan** 1995  
*University of Washington, Seattle, Washington*

- Designed experiments, set up testing protocol, supervised research assistants, performed data analysis, and reported on results for fiber modification research on fire resistance of paper fibers.

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## PROFESSIONAL EXPERIENCE

**Forensic Human Factors, LLC, Consulting Engineer, Opelika, AL** 2024-present

- Provide technical expertise and engineering analysis in legal cases involving occupational safety, human factors, and industrial, civil, and chemical engineering. Conduct inspections and analyze incidents to determine root causes, translating complex technical findings into clear reports for legal teams. Collaborate with attorneys to present engineering insights in court, ensuring a comprehensive understanding of case details.

**Applied Ergonomics Journal Peer Reviewer, Elsevier Publications** 2024-present

- Serve as a peer reviewer for the prestigious journal Applied Ergonomics, contributing to the advancement of ergonomics and human factors research. Evaluate submitted manuscripts for scientific rigor, methodological soundness, and relevance to the field, providing detailed feedback to authors and editors. Apply expertise in ergonomics, human factors, neurodiversity, and workplace design to assess research on topics such as cognitive load, usability, and workplace technologies.



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## PROFESSIONAL EXPERIENCE (CONTINUED)

**Applied Ergonomics Conference Planning (Networking) Committee Co-Chair, IISE** 2023-present

- Oversee venue selection and networking activities, ensuring engaging opportunities for collaboration among attendees. Coordinate logistics and integrate events into the conference schedule to enhance professional connections and the overall participant experience.

**Engineer Together Fellow, Auburn University, Samuel Ginn College of Engineering** 2023-2024

- Furthered the promotion of belonging in the Auburn College of Engineering, on the Engineering Inclusion and Diversity Leadership Committee, Inclusive Design Committee, and the Engineer Together Branding Committee, offering insight and support.

**Graduate Research Assistant, Auburn University** 2022-2024

- Conducted all aspects of research for three studies, including experimental design, participant recruitment, data collection, statistical design, and analysis. Coordinated research teams to ensure smooth project execution and adherence to timelines. Assisted fellow graduate students with their research, providing guidance on methodology, analysis, and troubleshooting. Applied advanced research techniques to address key questions, contributing to the development of innovative findings in the field.

**Graduate Teaching Assistant, Auburn University** 2021-2024

- Maghsoodloo Outstanding Graduate Teaching Assistant Award
- INSY 4970/INSY 7720 Systems Engineering – 1 offering (Fall23): Mentor and guide students through semester-long Systems Engineering Management Plan (SEMP) project
- INSY 5800/INSY 6800 Lean Systems, – 5 offerings (Spr22, Sum22, Fall22, Spr23, Sum23): Led an international team of graduate teaching assistants to develop the in person material, teach activities and labs, and redesign the online content for a remote offering of an interactive in- person lab experience

**Advisory Council Member, Northwest Clean Air Agency, Mount Vernon, WA** 2004-2006

- Provided technical and project support to the Northwest Clean Air Agency, as a volunteer on the advisory council. Served as Council Chairperson responsible for leading council meetings, providing direct communication contact for projects, and reporting to the NWCAA Board

**Plant Engineer, Plasmine Technology, Inc., Pensacola, FL and Bay Minette, AL** 1999-2000

- Provided technical, computer, training, research, and project support to this specialty paper chemical manufacturing company. Established standardized documentation for company procedures leading to ISO9000 certification. Led management and continuous improvement activities as a member of a quality team

**Inspection Engineer, Dunn & Associates, Civil and Environmental Engineering, Easley, SC** 1998

- Inspected a water tower installation requiring skillful coordination of engineers, water district, and multiple contractors and sub-contractors

**Process Engineer Intern, Penford Products, Cedar Rapids, IA** 1996

- Contributed research, data gathering, and analysis to a process-improvement project as a member of a team in this industrial starch plant

**System Designer, Option Care, Tukwila, WA** 1994

- Designed a healthcare provider tracking system in Microsoft Access and created a companywide reporting system.

**Manufacturing Lineperson, Redmond Futons, Redmond, WA** 1993

- Optimized the manufacturing line as a wood-product futon factory's only female floor worker.



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**TEACHING EXPERIENCE (\*complete course design, <sup>R</sup>redesign course)**

**Substitute Teacher**, St. Michael Catholic School, Auburn, AL

2024-present

Adapted quickly to teach diverse subjects, ensuring continuity and engagement in classroom learning. Effectively managed varying curricula and student needs while maintaining a productive environment.

**Private Tutor**, Owner Operator of Victoria Ballard Tutoring, LLC

2018-2022

Tutoring middle school through adult learners in a variety of subjects. Leading this small business with the goal of strengthening students' skills and confidence- especially in math, sciences, and standardized tests (ACT and GED). Tutored over 35 students, all of whom reached their personal course or ACT goals, six earning full tuition scholarships from their scores. Tutored students from Pensacola State College, Northwest Florida State College, and University of West Florida, in addition to students from the local high schools. Most common courses tutored:

- MAT 1033 Intermediate Algebra
- MAC 1105 College Algebra
- STA 2023 Elementary Statistics
- MAC 1140 Pre-Cal Algebra
- MAC 1114 Trigonometry
- CHM 1045 General Chemistry I

**Adjunct Faculty, Course Designer**, Skagit Valley Community College (**taught 48 courses**) 2005-2018

Multiple platforms (Blackboard, Moodle, and Canvas) were employed to design and facilitate online chemistry and earth science courses to disseminate the self-programmed material, quizzes, and tests to registered students through Canvas. Interactive discussions, field trips, and activities broaden the depth of learning.

- \*CHEM 100/CHEM 105 Chemical Concepts – **27 offerings** (Win05, Spr 05, Sum05, Spr06, Spr07, Sum06, Win07, Sum07, Fall07, Win08, Spr08, Fall08, Sum08, Win09, Spr09, Fall09, Win10, Spr10, Fall10, Win11, Win13, Fall12, Fall13, Fall14, Spr13, Sum14, Win13)
- \*CHEM 110 Chemical Concepts with Lab - **6 offerings** (Spr15, Fall15, Win16, Spr16, Sum16, Fall16)
- \*EASC 100 Intro to Earth Science / GEOL 100 Survey of Earth Science - **12 offerings** (Fall06, Fall07, Fall08, Spr09, Fall09, Sum09, Sum10, Win11, Fall12, Fall13, Fall14, Fall16)
- \*MATH 112 Precalculus II - **1 offering** (Spr04)
- \*PHYS 100 Physics for Non-Science Majors – **1 offering** (Spr10)
- \*OCEA 101 Introduction to Oceanography – **1 offering** (Win17)

**Online College Course Peer Reviewer**, Quality Matters

2017-2019

Served on a team of three peer reviewers to evaluate and create suggestions for implementation of the Quality Matters Course Rubric.

**Adjunct Faculty, Course Designer**, Columbia College

2005

Taught in person at the NAS Whidbey Island Education Center branch of Columbia College. Created engaging lab activities to teach challenging environmental science concepts to adult learners.

- \*BIOL-115-9A Introduction to Environmental Science – **1 offering** (WA6-05)

**Adjunct Faculty, Course Designer**, South Seattle Community College

2016

- \*MATH 148 Business Calculus – **1 offering** (Win16) Designed course for new online offering.

**Adjunct Faculty, Course Designer**, Embry-Riddle Aeronautical University

2004-2008

Taught in person at the NAS Whidbey Island Center to active-duty naval personnel and dependents. Created course activities, labs, and tours to illustrate concepts and further learning beyond standard lecture-style classroom techniques. Facilitated courses for ERAU Worldwide Online using eCollege.

- PHYS 304 Environmental Science – **1 offering** (04/Mar)
- MATH 106 Basic Algebra and Trigonometry – **4 offerings** (06/Jan, 06/Sept, 06/Dec, 07/Jan)
- PHYS 102 Explorations in Physics – **9 offerings** (05/Mar, 05/Apr, 05/May, 05/Jul, 05/Jun, 06/Apr, 06/Sept, 07/Jan, 07/May)
- PHYS 142 Environmental Science – **2 offerings** (05/Nov, 06/Aug, 08/Feb)



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## TEACHING EXPERIENCE (CONTINUED)

<b>Adjunct Faculty, Course Designer</b> , Chapman University	2004-2005
*EDSU-533-9213 Effective Chemistry Instruction for Single Subject Candidates – <b>1 offering</b> (TermE04)	
*EDSU-533-9209 Effective Math Instruction for Single Subject Cand.– <b>2 offerings</b> (TermE04, TermB05)	
*ESCU-101-9201/101-3601 Intro to Environ Science – <b>3 offerings</b> (TermC04, TermC05, TermD05)	
<b>Co-Op Teacher</b> , Navarre Homeschool Co-Op	2014-2017
Instructed middle and high school students STEAM elective classes in Robotics, Scratch Programming, and Cake Decorating once a week during the school year as a volunteer teacher to local homeschool students.	
<b>Substitute Teacher</b> , Abilene ISD	2010-2011
Instructed in a wide range of teaching positions in long-term and short-term assignments ranging from general classroom, science, to special needs teacher.	

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## MANAGEMENT EXPERIENCE

<b>CEO, Trainer, Horsemanship Lesson Instructor</b> , Ballard Ranch, LLC	2012-2018
<b>Camp Invention Director</b> , Holly-Navarre Intermediate School, Invent.org	2012-2014
<b>Service Unit Manager</b> , Girl Scouts of Texas Oklahoma Plains	2008-2011
<b>Service Unit Product Sales Manager</b> , Girl Scouts of Texas Oklahoma Plains	2007-2008
<b>Service Unit Event Coordinator</b> , Girl Scouts of Caprock Council	2006-2007
<b>Parent Teacher Organization President</b> , Holley Navarre Intermediate School	2011-2014
<b>Parent Teacher Association Executive Board Member</b> , Holley Navarre Middle School	2012-2015
<b>Parent Teacher Organization Executive Board Member</b> , Thomas Elementary School	2009-2011
<b>Parent Teacher Association Executive Board Member</b> , St. John's Episcopal School	2006-2009
<b>4-H Club Leader</b> , Projects: Leadership, Poultry, Photography, STEM, Robotics, Horses	2011-2021
<b>Leader</b> , Girl Scout Daisies, Brownies, Juniors, Cadettes, Seniors, and Ambassadors	1999-2013
<b>Commander</b> , Silver Wings, University of WA, Det 910	1996-1997

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## PUBLICATIONS

### Dissertation:

Ballard, V. (2024). Manufacturing Workplace Support Structures and Technology: Effects on Mental Workload, Performance, Self-Efficacy, and Social Anxiety on Both Neurotypical and ADHD Workers [Doctoral Thesis]. Auburn University.

### Book Chapter:

Ballard, V. (2025). Ergonomics and Diversity, Equity, and Inclusion: Theory and Practice: Chapter 9 - Designing for Neurodiversity. In B. Watts, Routledge & CRC Press (p. 288). Routledge: Taylor and Francis. <https://www.routledge.com/Ergonomics-and-Diversity-Equity-and-Inclusion-Theory-and-Practice/Watts/p/book/9781032654737>

### Pending Publications:

Hossain, M. M., Ballard, V. L., O'Leary, D., Purdy, G., & Sesek, R. F. (In Press). Exploring the Impact of Lean and Industry 4.0 on Operational Performance: An Experimental Case Study in a Controlled Lab Environment. Submitted to *Production Planning & Control* TBA.





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## PUBLICATIONS (CONTINUED)

**Contributions to Publications:** The following publications were developed as a result of my contributions to research as a research assistant and my master's project at the University of Washington.

1. Strand, S. E., Harem, G. N., & Stensel, H. D. (2009). Activated-Sludge Yield Reduction Using Chemical Uncouplers | Request PDF. *Water Environment Research*, 71(4), 454–458. <https://doi.org/DOI:10.2175/106143097X122013>
2. Allan, G. G., E. J. Gilmartin, and H. Struszczyk. "The Reaction of Chlorophosphazenes with Chitosan." *Journal of Macromolecular Science: Part A - Chemistry* 15, no. 4 (March 1, 1981): 599–608. <https://doi.org/10.1080/00222338108056751>.
3. Allan, G. G., and H. Struszczyk. "Thermal Properties of Chitosan-Phosphazene Polymers." *Journal of Thermal Analysis* 21, no. 1 (June 1, 1981): 113–17. <https://doi.org/10.1007/BF01913705>.
4. Honour, Eric C. "INCOSE: History of the International Council on Systems Engineering." *Systems Engineering* 1, no. 1 (1998): 4–13. [https://doi.org/10.1002/\(SICI\)1520-6858](https://doi.org/10.1002/(SICI)1520-6858).
5. Morais, Barney, and Brian Mar. "Systems Engineering Heuristics — Is There a Need to Innovate, Integrate, and Invigorate?" *INSIGHT* 4, no. 3 (2001): 20–22. <https://doi.org/10.1002/inst.20014320b>.
6. Newton, Chadwick D., H. David Stensel, John F. Ferguson, S. S. Beall, D. Jenkins, S. A. Vidanage, and Larry Sasser. "Of: A Systematic Analytical Artifact That Significantly Influences Anaerobic Digestion Efficiency Measurement." *Water Environment Research* 71, no. 6 (1999): 1257–59.
7. Palmer, Richard N., William J. Werick, Allison MacEwan, and Andrew W. Woods. "Modeling Water Resources Opportunities, Challenges and Trade-Offs: The Use of Shared Vision Modeling for Negotiation and Conflict Resolution." In *WRPMD'99: Preparing for the 21st Century*, 1–13, 1999.
8. Palmer, Richard N, Werick, William J, MacEwan Allison, and Woods, Andrew W.. "Modeling Water Resources Opportunities, Challenges and Trade-Offs: The Use of Shared Vision Modeling for Negotiation and Conflict Resolution," April 26, 2012, 1–13. [https://doi.org/10.1061/40430\(1999\)1](https://doi.org/10.1061/40430(1999)1).
9. Werick, W., Palmer, R., & Wood, A. (2012). Conducting a Virtual Flood for Devils Lake, North Dakota. 1–10. [https://doi.org/10.1061/40430\(1999\)128](https://doi.org/10.1061/40430(1999)128)
10. Ward, Amanda, H. David Stensel, John F. Ferguson, Gregory Ma, and Stan Hummel. "Effect of Autothermal Treatment on Anaerobic Digestion in the Dual Digestion Process." *Water Science and Technology, Water Quality International '98 Part 7. Wastewater: Biological Processes*, 38, no. 8 (January 1, 1998): 435–42. [https://doi.org/10.1016/S0273-1223\(98\)00721-5](https://doi.org/10.1016/S0273-1223(98)00721-5).

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## PRESENTATIONS (Selected and Most Recent)

1. Ballard, V. (2022a, September 21). Augmented Reality in Manufacturing: A help or a hindrance? [Session Presentation]. **IISE Lean Six Sigma Data Science Conference**, Atlanta, GA.
2. Ballard, V. (2022b, September 21). Evaluation of an Augmented Reality System in Tiger Motors Lean Education Center [Poster Presentation]. **IISE Lean Six Sigma Data Science Conference**, Atlanta, GA.
3. Ballard, V. (2022c, October 11). Tiger Motors Lean Education Center, Lean | Human Factors | Ergonomics | Safety | Technology [Poster Presentation]. **HFES 66th International Annual Meeting**, Atlanta, GA.
4. Ballard, V. (2022d, October 21). Augmented Reality in Manufacturing: A help or a hindrance? [Poster Presentation]. **Graduate Engineering Research Showcase**, Auburn University, Auburn, AL.
5. Ballard, V. (2022e, November 18). What is Industrial Engineering [Informational Session]. **SHEroes - K-12 STEM Recruitment Activity**, Tiger Motors Lean Education Center, Auburn University, Auburn, AL.
6. Ballard, V. (2023a, April 6). How can we all make the world a better place? [Featured Speaker]. **100+ Women Strong Annual Meeting**, Auburn University, Auburn, AL.
7. Ballard, V. (2023b, April 28). How can we all make the world a better place? [Award Recipient Speaker]. **Industrial & Systems Engineering Alumni Council Annual Meeting**, Auburn University, Auburn, AL.
8. Ballard, V. (2023c, July 12). How do Industrial Engineers Support Sustainability? [Educational Session]. **Minority Introduction to Engineering (MITE) Camp**, Brown-Kopel.



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### PRESENTATIONS (CONTINUED)

9. Ballard, V. (2023d, August 18). How do you Engineer Together? [Table Talk]. **Student Welcome Student Browse**, Auburn University, Gavin Gardens, Auburn, AL.
10. Ballard, V. (2023e, September 19). Unlocking Potential: Redefining Workspaces through Inclusivity and Innovative Universal Design. [Keynote Speaker]. **Cintas Ergonomics Competition Innovation Webinar Series**, Webinar.
11. Ballard, V. (2023f, October 12). Assessing the Cognitive Load and Learning of ADHD Workers in Manual Assembly Manufacturing Tasks with and without Augmentation [Poster Presentation]. **Graduate Engineering Research Showcase**, Auburn University, Auburn, AL.
12. Ballard, V. (2023g, October 19). Bloom Where You Are Planted [Keynote Speaker]. **College of Engineering Lunch and Learn**, Auburn University, Auburn, AL.
13. Ballard, V., Pantazes, R. (2023). Neurodiversity. **Auburn University College of Engineering Faculty DEI Colloquium**, [Seminar].
14. Ballard, V. (2024, July 3). Manufacturing Workplace Support Structures and Technology: Effects on Mental Workload, Performance, Self-Efficacy, and Social Anxiety on Both Neurotypical and ADHD Workers [Dissertation Defense]. **Auburn University**, Auburn, Alabama.
15. Ballard, V. (2024, December 6). Unlocking Potential: Redefining Workspaces through Inclusivity and Innovative Universal Design. [Keynote Speaker]. **Cintas Wellness Series**, Webinar.
16. Ballard, V. (2025, February). Empowering Minds: Creating Safe and Supportive Workplaces for All [Webinar]. **American Society of Safety Professionals**, Blacks in Safety Excellence Specialty Group.
17. Ballard, V. (2025, March). Cognitive Ergonomics in Manufacturing: The Impact of a Lean Tool and an Industry 4.0 Technology on Neurodivergent Workers with ADHD [Poster Presentation]. **Applied Ergonomics Conference**, Institute of Industrial and Systems Engineering, Orlando, Florida.
18. Ballard, V. (2025, March). Ergonomics and ADHD: Addressing Psychosocial Stress, Self-Efficacy, and Support Systems in Manufacturing Workers [Conference Presentation]. **Applied Ergonomics Conference**, Institute of Industrial and Systems Engineering, Orlando, Florida.
19. Ballard, V. (2025, March). Integrating Surface Safety and Ergonomics: Enhancing Worker Health, Safety, and Reducing Workplace Liability [Conference Panel Moderator]. **Applied Ergonomics Conference**, Institute of Industrial and Systems Engineering, Orlando, Florida.

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### RESEARCH/EDUCATIONAL FUNDING AWARDS 2022-2024

- National Institute for Occupational Safety and Health Fellowship
- Auburn University Engineer Together Fellowship
- Auburn University 100+ Women Strong Travel Scholarship
- Human Factors and Ergonomic Society – Augmented Cognition Research Funding
- American Society of Safety Professionals– Amazon
- Samuel Ginn College of Engineering Engineer Together Fellowship
- Society of Women Engineers – Intel Diversity Scholar
- Institute of Industrial and Systems Engineers Gilbreth Memorial Fellowship
- American Society of Safety Professionals – West Florida
- SME Education Foundation E Wayne K Graduate Award
- 100+ Women Strong Fellowships
- Maghsoodloo Outstanding Graduate Teaching Assistant Award
- Eglin Spouses Club Military Spouse Award
- Society of American Military Engineers – Emerald Coast Post Award



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**OUTREACH ACTIVITIES (Selected and most recent)**

- **Making a Difference in Engineering (MADE) –volunteer – 2024, 2025**  
Event volunteer through 100+ Women Strong Auburn University for STEM event for high school females.
- **Engineering Inclusive Design Committee – member – 2023-2024**  
Advise and consult on ways to incorporate inclusive design considerations into senior capstone projects at Auburn University College of Engineering.
- **Minority Introduction to Engineering (MITE) Camp - activity provider – 2022, 2023, 2024**  
Designed and taught one of the activities for minority middle school and high school students interested in Engineering careers.
- **Engineering Inclusion & Diversity Leadership Committee – member – 2023-2024** Coordinate and support activities to improve inclusion and diversity in the Auburn COE.
- **100+ Women Strong – mentor – 2023, 2024, 2025**  
Formal and informal mentoring of graduate and undergraduate female engineering students.
- **Back to School ASME/SME Networking Night – co-coordinator – 2023**  
Conceived the idea for an event for students and potential employers to network. Over 70 students attended a fully sponsored event with five companies looking for engineers interested in manufacturing.
- **100+ Women Strong Spring Fling Welcome Brunch - mentor – 2022, 2023, 2024**  
Mentoring newly admitted international graduate students beginning education at Auburn University.
- **Graduate Engineering Research Showcase – planning committee – 2021, 2022, 2023**  
Plan and execute the largest showcase of Samuel Ginn College of Engineering research, a poster and oral presentation contest coordinated with over 150 posters and 100 judges for monetary prizes.
- **Auburn University E-Day – A day of STEM education and H.S. recruiting, Coordinated the tour for the Industrial and Systems Engineering Department of the Tiger Motors Lean Education Center – 2023**
- **100+ Women Strong- Night of Networking Conference Planning committee – Event planned to connect female engineering students with job, life, and school skills and opportunities – 2022-2023**
- **Applied Ergonomics Conference (AEC) by Institute of Industrial and Systems Engineers (IISE)**  
virtual conference planning committee graduate student representative (2023 conference) – 2022-2023
- **BEST Robotics 100+ Women Strong Luncheon - panel member – 2022**  
Participated as a panelist for a luncheon for middle school and high school female students participating in the Regional Competition in BEST Robotics.
- **SHEROES – STEM Enrichment Day for 9-10<sup>th</sup> grade female students – activity provider - 2022**  
Designed and coordinated the main activity for students teaching Lean and Industrial Engineering concepts in Tiger Motors Lean Education Center
- **Rising Tigers Engineering Camp – activity provider – 2022**  
Designed and taught sessions of engineering camp in the Tiger Motors Lean Education Center.
- **InspireHer –volunteer - 2022**  
Event volunteer through Women in Engineer Auburn Student Chapter for STEM event for high school females.
- **Mad Scientist – STEM activity for elementary students through Graduate Women in Science – 2021**  
Planned and taught a station activity for students browsing different STEM fields.





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## AWARDS & HONORS

- IISE AEC Occucare Injury Prevention Practitioner of the Year Nominee 2025
- IISE Applied Ergonomics Conference (AEC) CNA Student of the Year Award 2024
- HFES National Student Chapter Award (as Chapter President) – Gold Level 2023
- Auburn College of Engineering 100+ Women Strong **Graduate Student Leadership** Award 2022-2023
- Auburn College of Engineering 100+ WS ISE **Outstanding Graduate Student** Award 2022-2023
- Auburn ISE Department **Maghsoodloo Outstanding Teaching Assistant** Award 2022-2023
- J.T. Black **Lean Manufacturing Student of the Year** 2021-2022
- Santa Rosa County 4-H **Volunteer of the Year** 2014, 2016
- Girl Scouts of the USA **Appreciation Pin**, Girl Scouts Texas Oklahoma Plains, 2009
- **National Delegate** of Girl Scouts of Texas Oklahoma Plains Council, 2008-2011
- **Military Family of the Year**, Abilene, Texas/Dyess AFB 2008
- **Outstanding Volunteer Award**, Girl Scouts Caprock Council, 2007
- Aerospace Education Foundation Silver Wings **Scholarship** (national award), 1996
- NASA Space Grant **Scholarship** (academic achievement), 1993, 1995, 1996
- **Girl Scout Gold Award**, Equivalent to the Boy Scout Eagle Award, 1993
- **Society of Women Engineers**, High Honor in Science and Mathematics, **1990-1993**

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## MEMBERSHIPS & AFFILIATIONS

- **Human Factors Ergonomics Association (HFES)**, past *president*, Club Mentor (2021-present)
- **American Society of Safety Professionals (ASSP)**, past *president*, Club Mentor (2021-present)
- **Institute of Industrial and Systems Engineers (IISE)**, *mentor to undergrad students, student member, conference presenter, Planning Committee Online IISE AEC 2023, Auburn Chapter* (2022-present)
- **Society of Women Engineers (SWE)**, *member, U of W, AU Chapter*, (1993-1998, 2021-present)
- **American Society of Civil Engineers (ASCE)**, *member U of W, AU Chapter*, (1998-1999, 2023-pres.)
- **American Society of Chemical Engineers (AIChE)**, *U of W, AU Chapter*, (1994-1999, 2023-present)
- **Auburn University Alumni Association**, *member* (2023-present)
- **University of Washington Alumni Association**, *member* (1997-lifetime)
- **Girl Scouts of the United States of America** *lifetime member* (1980-present, *lifetime member*)
- **Roman Catholic Church**, *volunteer, catechist, youth leader, VBS Director* (1999-present)
- **Daughters of the American Revolution (DAR)**, *Education Committee Chair, Community Service Committee Chair, School Outreach Committee Chair, Fort Pickens Chapter, Florida and Member, Light House Harry Chapter, Opelika, Alabama* (2020-present)
- **Society of Manufacturing Engineers (SME) at Auburn University and Tuskegee University**, *Founding Student Chapter President, first national joint club student organization* (2022-2024)
- **Council of Engineering Graduate Students (CEGS)**, *Ambassador, Exec Board Officer, Student Mentor, Safety Officer, Graduate Research Showcase Planning Committee* (2021-2024)
- **100+ Women Strong at Auburn University, Graduate Women in Science, Graduate Student Council, Auburn Veterans Student Association (ASVA), International Council on Systems Engineering (INCOSE), Society of Hispanic Professional Engineers (SHPE)**, *member* (2021-2024)
- **Florida 4-H** *volunteer, coach, chaperone, international exchange host, youth mentor* (2011-2021)
- **Save our Cats and Kittens (SOCKS)** Animal Shelter, *volunteer, foster* (2018-2020)
- **Girl Scouts Florida Panhandle Gold Award Committee**, *board member* (2018-2019)
- **US Air Force Key Spouse**, Dyess AFB, NAS Whidbey Island, *volunteer, mentor* (2004-2011)
- **Blackwater Saddle Club**, *member, volunteer* (2014-2018)
- **Five Flags Arabian Horse Association**, *member, volunteer* (2014-2016)
- **National Science Teachers Association (NSTA)**, *member* (2003-2015)
- **Silver Wings**, Det 910 University of Washington, *past Commander* (1994-1997)