

CONTACT INFORMATION	Auburn University Department of Industrial and Systems Engineering 3322 Shelby Center for Engineering Technology Auburn, AL 36849 USA		Mobile: +1-256-682-7591 E-mail: chelsea@auburn.edu Web: chelsmau.github.io
QUALIFICATIONS AND INTERESTS	Product innovation, human factors, ergonomics, systems safety, industrial hygiene, resilience engineering, occupational risk exposure assessment, engineering psychology, personal protective equipment, psychosocial safety, musculoskeletal and cumulative trauma disorders, hearing loss prevention, environmental stressors, fatigue, advanced manufacturing systems, engineering controls, total worker health, machine safety, patient handling, productive aging, strategic foresight, workplace violence, healthcare systems		
AVAILABILITY	<ul style="list-style-type: none"> • Start time is negotiable; may be possible to start immediately • Geographic location is flexible, but there is preference for Auburn, AL 		
EDUCATION	<p>Auburn University, Auburn, AL <i>*expected graduation date in italics</i></p> <p>Ph.D., Industrial and Systems Engineering, <i>May 2028</i> GPA: 3.87 (4.0 scale)</p> <ul style="list-style-type: none"> • Thesis Topic: Occupational Noise Hazard Assessment • Advisor: Dr. Richard F. Sesek • Area of Study: Occupational Safety and Ergonomics <p>M.S., Industrial and Systems Engineering, <i>August 2025</i> GPA: 3.87 (4.0 scale)</p> <p>B.S., Industrial and Systems Engineering, May 2013 GPA: 3.43 (4.0 scale)</p> <ul style="list-style-type: none"> • cum Laude, With Honors in Engineering <p>Columbus State University, Columbus, GA</p> <p>M.A.T., Secondary Mathematics Education, December 2018 GPA: 4.0 (4.0 scale)</p>		
PROFESSIONAL EXPERIENCE	<p>Auburn University Samuel Ginn College of Engineering, Auburn, AL</p> <p>Engineer Together Fellow August 2024 to Present</p> <ul style="list-style-type: none"> • Graduate student assisting the Associate Dean of the Samuel Ginn College of Engineering. • Job duties include developing and championing programs and events designed to foster a welcoming culture for all engineering students. <p>Auburn University Libraries, Auburn, AL</p> <p>Graduate Student Assistant August 2023 to July 2024</p> <ul style="list-style-type: none"> • Graduate student assisting in the DataSpace department of Auburn University's Innovation and Research Commons at the campus's main library. • Specialties included programming assistance with research data analytics in Excel, Matlab, Python, and R. 		

Northside High School, Columbus, GA

Secondary Mathematics Teacher

January 2019 to May 2020

- Engineering magnet high school within the Muscogee County School System
- Courses taught: Algebra I, Honors Geometry, Accelerated Geometry B/Algebra II
- Organized the collaboration between subject level mathematics instructors and district coaches for common assessment baseline process development, improvement, and revision in accordance with GA state standards
- Performed statistical analytics to be communicated with school stakeholders and administrators in regards to Positive Behavioral Interventions and Supports (PBIS) and GA College and Career Ready Performance Index (CCRPI)

Brookstone School, Columbus, GA

Secondary Educator

July 2014 to December 2016

- Courses taught: Pre-Algebra, Algebra I, 8th Grade Physical Science, 6th Grade Technology, 8th Grade Technology
- Coach for the Middle School Math Team, mentor for FIRST Robotics Team, and assistant coach for the Middle School Girls' Soccer Team
- Created and designed the 8th Grade ACCEL program curriculum and process for gifted students
- Created and presented instructional support and design materials for colleagues for the integration of Google Apps for Education (Google A4E) in classrooms

Glenwood School, Smiths Station, AL

Secondary Educator

July 2013 to July 2014

- Courses taught: Algebra I, Regular and Honors Chemistry, Honors Physics, ACT Prep, and Robotics
- Guided and mentored students who advanced to the Alabama State Science Fair and Regeneron International Science and Engineering Fair
- Champion and advocate for the adoption and integration of Google A4E at the school's secondary level to aid in synchronous on-site and remote instructional material delivery and assessment
- Head Coach for school Robotics Team

PROVISIONAL
PATENTS

- [1] R.F. Sesek, R.M. Sesek, **C.D. McMeen**, "Dynamic Isopleth Generation and Application," U.S. Provisional Patent Application 63/716,361, filed Nov. 5, 2024.
- [2] R.F. Sesek, R.M. Sesek, **C.D. McMeen**, "Ear to Ear Empathy Hearing Loss Simulator," U.S. Provisional Patent Application 63/703,299, filed Oct. 4, 2024.

INVITED TALKS

- [3] **C.D. McMeen**, Research into Occupational Noise and Patent Applications. Presented to the Auburn University Safety Engineering I Class, November 12, 2024.
- [4] **C.D. McMeen**, Explorations in Ph.D. Research and Invention Disclosures. Presented to the Auburn University Occupational Safety and Ergonomics (OSE) Forum, November 6, 2024.

WORKSHOPS

- [5] R.F. Sesek, M.S. Barim, R.M. Sesek, **C.D. McMeen** "OSH Practitioners Workshop for Generating Solutions with Limited Resources by Thinking Like a Research Scientist." 8-hour workshop presented at 41st Annual Conference on Safety and Industrial Hygiene (invited). Salt Lake City, Utah. October 9, 2024.

[6] **C.D. McMeen**, "Data Wrangling with R Programming." 1.5-hour workshop presented at Auburn University's Savvy Researcher Bootcamp (invited). Auburn, AL. February 3, 2024.

ACADEMIC SERVICE

Auburn University, Auburn, AL

- Human Factors and Ergonomics Society, *Chapter President*, 2024–present.
- American Society of Safety Professionals, *Chapter President*, 2024–present.
- Alpha Pi Mu Industrial Engineering Honor Society, *Treasurer*, 2012–2013.
- Society of Women Engineers, *Outreach Officer*, 2011–2012.

COMMITTEE SERVICE

Auburn University, Auburn, AL

- Member, Design for Humanity Competition Committee, *Engineer Together Day*, 2024-2025
- Judge, Equity in Design, *Engineering Undergraduate Capstone Design Showcase*, 2024

PROFESSIONAL MEMBERSHIPS

- American Society of Safety Professionals, 2023–present
- Human Factors and Ergonomics Society, 2023–present
- Society of Manufacturing Engineers, 2023–present
- Alpha Pi Mu Industrial Engineering Honor Society, 2012–present
- Society of Women Engineers, 2010–present

HARDWARE AND SOFTWARE SKILLS

Instrumentation, Test, and Measurement:

- Movella™ Xsens Inertial Motion Capture System
- Tobii Eye Motion Tracking System

Programming:

- R, Python, JavaScript, L^AT_EX, MATLAB, Mathematica

Software Packages:

- AutoCAD, SolidWorks, MINITAB, 3DSSPP

Desktop Editing and Productivity Software:

- Adobe (Acrobat, Photoshop, Lightroom)
- T_EX (L^AT_EX, B_IB_TE_X),
- Microsoft Office, Google Drive Apps
- GIMP, InkScape

MORE INFORMATION

More information and auxiliary documents can be found at my website.