Emily K. Parcell

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EDUCATION

Doctor of Philosophy, Engineering Psychology   **May 2026**
    Georgia Institute of Technology (GT)   GPA: 3.90
Master of Science, Human Factors   **May 2021**
    Embry-Riddle Aeronautical University (ERAU)   GPA: 4.00
Bachelor of Science, Human Factors Psychology   **December 2019**
    Embry-Riddle Aeronautical University   GPA: 3.94

PUBLICATIONS

Under Review:

Parcell, E., Scott-Sharoni, S., Fereydooni, N., Walker, B., Lenneman, J., Austin, B., & Yoshida, T. (2023, October 23-27). *A novel application of non-linear dynamics investigating cognitive workload and situational trust in highly automated vehicles.* [Poster Presentation]. Human Factors and Ergonomics Society (HFES) 67th International Annual Meeting, Washington, D.C., United States.

Gleaton, E., **Parcell, E**., & Madera, M. (2023, October 23-27). *Understanding user perspectives: What is the meaning of technology mastery?* [Poster Presentation]. Human Factors and Ergonomics Society (HFES) 67th International Annual Meeting, Washington, DC, United States.

Published/Presented:

Parcell, E., Patel, S., Chaparro, A., Severin, C., & Cho, Y. (2021, October 3-8). *Distracted driving up close: Effects of driver distraction on vehicle control* [Poster Presentation]. Human Factors and Ergonomics Society (HFES) 65th International Annual Meeting, Baltimore, Maryland, United States.

PROJECTS & RESEARCH

Technology Mastery Scale Development - GT Sonification Lab   2022
    In progress - researching and developing a scale for general technology mastery and expertise.
Self-efficacy and Technology Acceptance in Older Adults - GT Sonification Lab   2022
    In progress - building a model to evaluate the role of self-efficacy in users' willingness to accept advanced technologies, such as automated vehicles, through survey and interviews.
E-Commerce Usability Evaluation - Technoprise Global   2022
    Contracted to provide statistical analysis and methodology guidance for a usability study evaluating E-Commerce platforms for users with disabilities.
Consumer Education in Automated Driving - GT Sonification Lab   2021
    In progress – creating and evaluating an AR/VR application to train drivers on safe use of advanced driver-assistance systems.
Distracted Driving - ERAU Aging, Perception, & Performance Lab (APPL)   2021
    Evaluated whether distracted driving (specifically cell phone use) can be indicated by variation in speed velocity and attempted to better quantify this variation in relation to current literature standards.
EcoCAR - ERAU Mechanical Engineering Department   2021
    Worked as part of the Human-Machine Interface/User Experience team to create an interactive in-car training video for ride-sharing platforms to teach safe use of various autonomous features.
Pedestrian Orientation and Intention - ERAU APPL   2021
    Evaluated whether pedestrian orientation or perceived intent affects how the driver allocates their attention in the scene and how this information affects the driver's perceived safety of the environment using eye tracking and gaze behavior.

Classroom Ergonomic Evaluation - Kumon of Daytona Beach   2020
  Conducted an ergonomic evaluation of a classroom-style workplace, noted areas that could lead
  to work-related musculoskeletal disorders, and recommended changes based on results.
Usability Testing Evaluation - One Voice for Volusia   2019
  Partnered with One Voice for Volusia to conduct usability testing on their website. Included work
  in personas/profiles, heuristic evaluations, facilitating, data analysis, and prototyping/redesign.
Auto-shop Ergonomic Evaluation - Barker Tire Pros   2018
  Conducted a study to determine the cause of a musculoskeletal disorder in an automotive
  maintenance shop. Proposed a redesigned workplace and equipment improvements.

SKILLS

Statistical
- Variance
  - ANOVA/ANCOVA/MANOVA, T-test, Chi-Square
- Linear Regression
  - Simple, Multiple
- Structural Equation Modeling
  - Path analysis, Factor analysis, Principal Components
- Nonlinear dynamics
  - Time series analysis, Fractal analysis, Lyapunov exponents
- Software
  - SPSS, RStudio, EQS, Excel

Research
- Human-Computer Interaction Methods
  - Heuristic evaluation, journey mapping, personas, user testing, survey/interview, usability/accessibility evaluation
- Human Factors Methods
  - Hierarchical Task Analysis, Cognitive Walkthrough, Repertory Grid Analysis, Technique for Human Error Assessment
- Physiological Measures
  - Heart rate, eye tracking
- Design and Prototyping
  - Axure, Balsamiq, Figma

TEACHING EXPERIENCE

Lab Instructor - Georgia Institute of Technology   2023-Present
  <u>Sensation and Perception</u> – design and teach lecture materials, organize lab experiments, grade
  and design assignments.
Teaching Assistant - Georgia Institute of Technology   2021-Present
  <u>Psychology Research Methods for Human-Computer Interaction</u> - mentor teams of first-year
  graduate students to conduct a semester-long project focused on accessibility/usability.
  <u>Abnormal Psychology</u> - grade assignments, provide technical support during lecture meetings,
  and provide academic support to students.
  <u>Sensation and Perception</u> - grade assessments/assignments, provide academic support, and
  conduct some lectures.
Peer Mentor/Teaching Assistant - ERAU Office of Undergraduate Advising   2018-2020
  Oversaw instruction in a college success skills class required for all incoming freshmen and
  created comprehensive academic study plans for each student.

LEADERSHIP

Human Factors and Ergonomics Society – GT Chapter Secretary and Webmaster	2022-2023
Human Factors and Ergonomics Society – GT Chapter Vice President	2023-2024
GT Psychology Graduate Student Council First Year Mentor	2022-2023
GT Psychology Graduate Student Council Co-President	2023-2024

ACCOMPLISHMENTS AND AWARDS

Psychology Interlab Grant, Georgia Institute of Technology	2022
President's Fellowship, Georgia Institute of Technology	2021
Psi Chi, The International Honor Society in Psychology	2019
Constance Hunter Memorial Endowed Scholarship, ERAU	2019
Dudley A. Whitman Presidential Scholarship, ERAU	2018