

# Ellen Szubski, M.S., Ph.D., CXLT, CPSI, AHFP

## **Human Factors Consultant**

Human Factors & Safety
Illumination Evaluation
OSHA Regulations/Codes & Standards
Premises Liability
Public Playground Incident Analysis
Slip, Trip & Fall Incident Analysis
Vehicle/Pedestrian/Bicycle Crash Investigations
Workplace Injuries

2016  Bachelor of Science in Psychology Clemson University, Clemson, South Carolina  Master of Science in Applied Psychology Clemson University, Clemson, South Carolina	
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2022 Doctor of Philosophy in Human Factors Psychology Clemson University, Clemson, South Carolina	

**2022 to Present** The Warren Group, Inc., Irmo, South Carolina. Human Factors Consultant. Specialized consulting related to incidents involving personal injury, safety, and hazard evaluation.

#### **Incident Assessment**

Analyze incidents from a human factors perspective. These incidents and analyses often involve illumination, conspicuity, visual perception, and human affordances, as well as identification of additional contributing risk factors.

Slip, trip and fall evaluations including slip resistance testing of walkway surfaces, construction and industrial accident investigation, OSHA compliance, standards and codes compliance, and premises liability.

Human factors consideration of collision and crash incidents involving drivers and vulnerable road users including visibility, conspicuity, lighting, line of sight, driver distraction, roadway markings, and contributing environmental conditions.

## **Accident Prevention and Risk Management**

Hazard identification, risk assessment, safety programs, OSHA, ANSI and ADA standards and codes compliance, and premises liability.

#### 2021 to 2021

Applied Building Sciences (ABS), Charleston, South Carolina. Human Factors Forensic Consultant Intern. Conducted site visits that assessed the circumstances surrounding an incident. Held meetings with clients about their cases. Wrote and delivered reports.

## 2018 to 2018

Air Force Research Laboratory (AFRL)/711th Human Performance Wing/Air Force Repperger Research Program, Fort Sam Houston, TX. Human Factors Intern. Conducted, collected, and analyzed data for empirical research. Executed qualitive and quantitative visual performance data analysis for empirical research. Wrote and delivered presentation of findings to colleagues.



## **EXPERIENCE (CONTINUED)**

#### 2016 to 2022

Psychology Department, Clemson University, Clemson, South Carolina. Graduate Research Assistant in the Visual Perception and Performance Laboratory. Designed, conducted, collected, and analyzed data for empirical research. Executed qualitative and quantitative analysis. Extensive experience with on-road surface transportation methods. Supervised and directed undergraduate research students. Gave public presentations of findings at conferences. Assisted with research for academic publications. Worked with the overall goal of improving the conspicuity of pedestrians and bicyclists in challenging conditions such as nighttime and assessed the general knowledge of visibility safety aids.

#### 2016 to 2022

Clemson University, Clemson South Carolina. Graduate Teaching Assistant Courses Taught: Senior Psychology Lab; Cognitive Psychology Lab, Introduction to Experimental Statistics Lab, and Advanced Psychology Methods. Utilized email, phone, and in-person meetings to answer questions and mentor struggling students. Adhered to university requirements for student assignments, testing, and grading of work. Tracked attendance, projects, labs, reports, and other class and student metrics. Developed guides and course materials to reinforce lecture information and help students learn.

## 2019 to 2021

Clemson University, Clemson, South Carolina. Instructor of Record.
Course Taught: Advanced Psychological Research Methods. Course Description:
The curriculum was focused on techniques of empirical psychological research (experiments, quasi-experiments, non-experimental research, etc.). Students designed and carried out their own empirical research projects, normally involving data collected from human participants with the instructor's guidance. Created lesson plans, lecture content, and presented lectures for Clemson Undergraduates. Tutored students requiring additional instructional assistance after class. Uploaded online lessons and tools for students to use in their studies.

#### 2016 to 2022

Clemson University Usability/UX Projects

Clemson University Facilities

- Critically analyzed and assessed the usability of the Recycling Waste Sorting Bins used on Clemson's campus
- Conducted interviews with subject matter experts; created task analyses for ideal waste disposal for both users with campus offices and those without; conducted naturalistic observation and user interviews; identified critical areas for improvement in the current waste sorting system

Clemson University Custodial Satisfaction Project

- Created a survey to benchmark performance and better measure satisfaction with the custodial performance
- Identified stakeholder needs that influence perceptions of custodial performance through interviews and card sorting; generated metrics to measure the needs for an online educational tool



## **EXPERIENCE (CONTINUED)**

2016 to 2022

Clemson University Custodial Satisfaction Project (Continued)
Online Education Tool

 Performed Heuristic evaluations of all aspects of the educational tool's website to assess the usability of the website's design

#### PROFESSIONAL ORGANIZATIONS

Human Factors and Ergonomics Society (HFES) - Forensic Professional Technical Group ASTM - Active Member of Committee F13 on Pedestrian/Walkway Safety and Footwear

## **CERTIFICATIONS**

Occupational Safety and Health Administration (OSHA) 30- General Industry

Certified XL Tribometrist by EXCEL TRIBOMETERS, LLC- (#2209923)

Certified Playground Safety Inspector (#56004-1125)

Certificant Associate Human Factors Professional (#2569)

## COURSES, SEMINARS & LECTURES PRESENTED

One-hour presentation entitled "If there are Humans, there are Human Factors"

**February 15, 2024:** North Carolina Association of Defense Attorneys Continuing Education Webinar May 22, 2024: Charleston Area Claims Association (CACA) Meeting, Charleston, SC

#### October 25, 2023

"Case Study: An Analysis of a Sidewalk Trip and Fall after Repair Utilizing Photograph Scaling." Presented at the Human Factors and Ergonomics Society Annual Meeting, Washington, D.C.

#### October 1, 2020

"Does the Presence of Biological Motion Facilitate Time-to-Contact Estimations?," presented with S.L. King and R.A. Tyrrell at the International Annual Meeting of the Human Factors and Ergonomic Society Online

#### October 1, 2020

"The temporal dynamics by which drivers become aware of bicyclists who use taillights in daytime.," a paper presented with D.E. Edewaard, R.A. Tyrrell, P. J. Rosoopa, D. T. Duchowski and S. L. King at the International Annual Meeting of the Human Factors and Ergonomic Society Online



## **COURSES, SEMINARS & LECTURES PRESENTED (Continued)**

## October 29, 2019

"Can Highlighting a Pedestrian's Biological Motion at Night Mitigate the Negative Effect of Driver Distraction?," a paper presented with D.E. Edewaard and R.A. Tyrrell at the Human Factors and Ergonomics Society Annual Meeting, Seattle, WA.

#### June 27, 2019

"The conspicuity benefits of bicycle taillights in daylight.," presented with D.E. Edewaard, R.A. Tyrrell and A.T. Duchowski in *Driving Assessment Conference* (Vol. 10, No. 2019). University of Iowa.

#### **October 3, 2018**

"Perceptual Judgments of the Efficacy of Visibility Aids," a paper presented with D.K. Fekety, D.E. Edewaard, and R.A. Tyrrell at the Human Factors and Ergonomics Society Annual Meeting, Philadelphia, PA

#### October 11, 2017

"An open- road study of the daytime conspicuity benefits of fluorescent bicyclist apparel," presented with D.K. Fekety, D.E. Edewaard, R.A. Tyrrell and D. Moore at the Human Factors and Ergonomics Society Annual Meeting, Austin, TX, USA.

#### October 10, 2017

"The Conspicuity Benefits of Dynamic and Static Bicycle Taillights at Night," presented with Darlene E. Edewaard, Drea K. Fekety, Richard A. Tyrrell, and Patrick J. Rosopa. at the Human Factors and Ergonomic Society Annual Meeting, Austin, TX, USA.

#### **PUBLICATIONS**

King, Savana & **Szubski, Ellen** & Tyrrell, Richard. (2023). Road Users Fail to Appreciate the Special Optical Properties of Retroreflective Materials. Human Factors: The Journal of the Human Factors and Ergonomics Society. 10.1177/00187208231210644

Edewaard, D. E., Fekety, D. K., **Szubski, E. C.**, & Tyrrell, R. A. (2020). Highlighting bicyclist biological motion enhances their conspicuity in daylight. *Accident Analysis & Prevention*, *142*, 105575.

## **POSTERS**

• Wokaty, S, Tsirkas, D, Szubski, E, Fekey, D, Edewaard, D, Tyrrell, R. (2018, April). The Efficacy of Visibility Aids in Nighttime Driving Scenarios. Poster presentation at the 2nd Annual Meeting of the Southeastern Human Factors Applied Research Conference, Clemson, SC



## **POSTERS (Continued)**

- Tsirkas, D, Wokaty, S, Szubski, E, Fekey, D, Edewaard, D, Tyrrell, R. (2018, March). Perception of Efficacy of Visibility Aids. Poster presentation at the 64th Annual Meeting of the Southeastern Psychological Association, Charleston, SC.
- Rummel, E. G., Horth, N. L., Szubski, E. C., Ferguson, E. M., Limyansky, S. E., Morris, D. M., & Pilcher, J. J. (2015, April). Sleep Consistency as a Predictor of Daily Well-Being: Sleep Habits in Clemson and Vienna Students. Poster presentation at Clemson University 10th Annual Focus on Creative Inquiry Symposium, Clemson, SC.
- Szubski, E. C., Rummel, E. G., Roberson, T. A., Jellen, J. C., Lamm, C., & Pilcher, J. J. (2016, March). Differences in sleep consistency and sleep habits across American and Austrian cultures. Poster presentation at the 62nd Annual Meeting of the Southeastern Psychological Association, New Orleans, LA.
- Szubski, E. C., Roberson, T. A., Old, A. L., Jellen, J. C., Lamm, C., & Pilcher, J. J. (2016, April). Culture sleep habits: A comparison of Austria *and America*. Poster presentation at 2016 CBSHS/CoED Research Forum, Clemson University, Clemson, SC.

