

LILIAN GARZA

MS

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HUMAN FACTORS

EDUCATION

	UNIVERSITÄT ULM	
MS	Cognitive Systems	2020
	TEXAS A&M UNIVERSITY	
BS	Psychology	2018
	Minor: Neuroscience	

LICENSES & CERTIFICATIONS

SAE's Accident Reconstruction
Certificate Program
OSHA 30-Hour General Industry
WACH: NFSI walkway auditor certificate
holder

AFFILIATIONS

Human Factors and Ergonomics Society
Newsletter Editor for Extended
Reality Technical Group
Society of Automotive Engineers
American Society of Safety
Professionals

PROFESSIONAL PROFILE

Lilian Garza, M.S. is a forensic human-factors scientist at Explico. Human factors is the scientific field of research dealing with the capabilities and limitations of people as they interact with systems made up of products, tools, technology, information, organizations, environments, and other people. As a scientist, she has experience analyzing how human attention, performance, perception (i.e. visual, auditory and tactile), and decision-making contribute to incidents. Her work draws on established human-factors theory—including how biases and human error—to evaluate real-world events with technical precision. She regularly examines how lighting, visibility, conspicuity, driver, pedestrian, and operator behavior and capabilities, and environmental cues influence human performance and situational awareness in transportation, occupational settings, and in slip/trips and falls.

Her background and education in cognitive systems and psychology includes extensive application of human factor principles. Across her casework, Lilian is known for translating complex human-factors science into concise, high-clarity technical writing. She approaches each case with a disciplined, evidence-driven methodology, ensuring that human capabilities, limitations, and environmental factors are accurately represented in the overall causal narrative.

AREAS OF EXPERTISE

Trips, Slips, and Falls
Driver Behaviors, Capabilities, and Limitations
Industrial and Construction Machinery Operation and Safety
Warning, Labeling, and Instructions

EXPERIENCE

Explico

2023 - Present

Scientist

Associate Scientist

2022

Infosys Limited

2021 - 2022

Senior Consultant

Texas A&M: Department of Psychology

2017

Research Assistant

PEER-REVIEWER PUBLICATIONS

Arndt, S. R., Garza, L., Phillips, K. B., & Figueroa Jacinto, R. (2024). Case Study: Can Deaf Truck Drivers Be Trained in a Reasonably Safe Manner; An Equal Employment Opportunity Commission Suit. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 0(0). <https://doi.org/10.1177/10711813241275933>.

RELEVANT COURSEWORK

UC Berkeley's Center for Occupational and Environmental Health Program 2025 - 225 contact hour

MISCELLANEOUS

Fluent in English, Spanish and Intermediate in German

PRESENTATIONS & CONFERENCES

Co-Presenter. Guest Lecturer at Lawrence Technical University regarding Human Factors in Forensics (BME 4093 Lecture)

Co-Presenter. Figueroa Jacinto, R., Kappler, E., Petroskey, K., Arndt, S., & Leipold, T. (2022). Naturalistic Observations of Human Driving Perceptions and Vehicle Kinematics at Stop Sign-Controlled Intersections. Proceedings of the Human Factors and Ergonomics Society Annual Meeting 2022, 66(1).

Presenter. Kappler, E., Figueroa Jacinto, R., & Arndt, S. (2022, September). Evaluation of Visual Acuity and Perceptual Field of View Using the Varjo XR-3 Headset in a Virtual Environment. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 66, No.1, pp. 2193-2197). Sage CA: Los Angeles, CA: SAGE Publications.

Presenter of interactive sessions. Spain, R., Bailey S.K., Goldberg, B., Sail, R., Carmody, K., Ficke, C., ... & Bond, A. (2022, September). Me and My VE 2022: Human Factors Applications Using Virtual Reality, Mixed Reality, and Virtual Environments. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 66, No. 1, pp. 2188-2192). Sage CA: Los Angeles, CA: SAGE Publications.

PROFESSIONAL DEVELOPMENT

OSHA

Lock-out, Tag-out

Society of Automotive Engineers

Introduction to Brake Control Systems: ABS, TCS, and ESC, SAE course Certificate

Apply Automotive EDR Data to Traffic Crash Reconstruction, Washington D.C., April 23-25, 2024

Vehicle Crash Reconstruction: Principles and Technology SAE course Certificate

Accident Reconstruction: Autonomous Vehicle & ADAS SAE course Certificate

The Fundamental of Vehicle Dynamics SAE course Certificate

Driver Distraction from Electronic Devices: insights and implications SAE course Certificate

Driver Research Institute

2024 User Forum, hosted by Dr. Jeffrey Muttart, Long Beach, CA, February 17-19, 2024