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Professional Profile

Dr. Reeves is a vision scientist with expertise in human perception and attention. She has over eight years of experience designing human research studies, analyzing eye tracking and behavioral data, investigating new technologies for those with visual or cognitive impairments, and making inferences about how humans typically navigate the visual world. She has presented her research all over the world and has published over eight peer-reviewed articles in leading vision and psychology research journals. Dr. Reeves uses and applies her expertise in the investigation of human factors as it relates to driver behavior, investigating slip/trip/fall accidents, and compliance with warning and safety information.

Dr. Reeves earned her PhD in Vision Science at the University of California Berkeley, where she primarily focused on measuring eye movements using state-of-the-art eye trackers, virtual reality headsets, and custom-built displays. Important aspects of her work include investigating the role of head orientation and natural scene statistics in eye movement behavior; characterizing slow fixational eye movements during natural viewing; and understanding eye position factors that contribute to depth perception. During her PhD, Dr. Reeves served as a fellow in the Center for Innovation in Vision and Optics (CIVO) and taught and mentored graduate students in the field of Optometry.

Academic Credentials & Professional Honors

Ph.D., Vision Science, University of California, Berkeley, 2025

B.A., Behavioral Neuroscience, Connecticut College, 2016

National Eye Institute Early Career Scientist Award (2024)

Center for Innovation in Vision and Optics (CIVO) Fellowship Award (2022-2024)

Society for Neuroscience Trainee Professional Development Award (2021)

Fulbright English Teaching Award (2016)

Prior Experience

Research Assistant, Massachusetts Eye and Ear, Harvard Medical School, 2017-2020 Fulbright English Teaching Assistant, 2016-2017

Professional Affiliations

Human Factors and Ergonomics Society, 2025-present

Vision Science Society, 2021-2025

Society for Neuroscience, 2021

Publications

Reeves S, Otero-Millan J. The influence of scene tilt on saccade directions is amplitude dependent. Journal of Neurological Sciences, 2023; 448. doi:10.1016/j.jns.2023.120635

Reeves S, Cooper E, Rodriguez R, Otero-Millan J. Head tilt influences saccade directions during free viewing. eNeuro, 2022; 0273-22.2022. doi:10.1523/ENEURO.0273-22.2022

Reeves S, Williams V, Blacker D, Woods R. Further evaluation of narrative description as a measure of cognitive function in Alzheimer's Disease. Neuropsychology 2022; 37:801–812. doi:10.1037/neu0000884

Costela F, Reeves S, Woods R. The effect of zoom magnification and large display on video comprehension in individuals with central vision loss. Translational Vision Science & Technology 2021; 10:30. doi:10.1167/tvst.10.8.30

Costela F, Reeves S, Woods R. An implementation of Bubble Magnification did not improve the video comprehension of individuals with central vision loss. Ophthalmic and Physiological Optics 2021; 41:842–852. doi:10.1111/opo.12797

Reeves S, Williams V, Costela F, Palumbo R, Umoren O, Christopher M, Blacker D, Woods R. Narrative video scene description task discriminates between levels of cognitive impairment in Alzheimer's Disease. Neuropsychology 2020; 34:437–446. doi:10.1037/neu0000621

Costela F, Reeves S, Woods R. Orientation of preferred retinal locus (PRL) is maintained following changes in simulated scotoma size. Journal of Vision 2020; 20:25. doi:10.1167/jov.20.7.25

Costela F, Saunders D, Rose D, Katjezovic S, Reeves S, Woods R. People with central vision loss have difficulty watching videos. Investigative Ophthalmology & Visual Science 2019; 60:358–364. doi:10.1167/iovs.18-25540

Presentations

Reeves S, Otero-Millan J. Human eye movements have a downward drift bias during visual exploration. Vision Science Society Conference, St. Pete, FL, 2025.

Reeves S. Eye movement tendencies in humans. Wonderfest's Ask a Science Envoy: Tiny Galaxies and Eye Movements, Novato, CA, 2025.

Reeves S. Why vestibular reflexes may change with vergence. Center for Innovation in Vision and Optics (CIVO) Annual Meeting, Berkeley, CA, 2024.

Reeves S, Otero-Millan J. Head and scene orientation influence the ocular motor system. European Summer School on Eye Movements Athens, Greece, 2024.

Reeves S, Otero-Millan J. Environmental regularities are predictive of saccade direction biases via combination of allocentric and egocentric mechanisms. European Conference on Visual Perception, Aberdeen, Scotland, 2024.

Reeves S, Otero-Millan J. The influence of ocular counter roll from simulated head tilt on stereoacuity. International Multisensory Research Forum, Reno, NV, 2024.

Reeves S, Otero-Millan J. The influence of simulated ocular counter roll on stereoacuity. Vision Science

Society Conference, St. Pete, FL, 2024.

Reeves S. The influence of head and scene orientation on the ocular motor system. Center for Innovation in Vision and Optics (CIVO) Annual Meeting, Berkeley, CA, 2023.

Reeves S, Otero-Millan J. Factors influencing saccade directions in response to image tilt. Gordon Research Conference on Eye Movements, South Hadley, MA, 2023.

Otero-Millan J, Reeves S. Eye torsion induced by a tilted image is larger during free viewing than fixation. Vision Science Society Conference, St. Pete, FL, 2023.

Reeves S, Otero-Millan J. Microsaccade directions are not influenced by the orientation of natural scene tilt during fixation. Vision Science Society Conference, St. Pete, FL, 2022.

Reeves S, Cooper E, Rodriguez R, Otero-Millan J. Head tilt influences saccade directions during free viewing. Society for Neuroscience Conference, Chicago, IL, 2021.

Reeves S, Elze T, Costela F, Sandberg M, Weigel-DiFranco C, Woods R. Goldmann visual field patterns in retinitis pigmentosa from unsupervised machine learning. Association for Research in Vision and Ophthalmology, Baltimore, MD, 2020.

Reeves S, Williams V, Blacker D, Woods R. Measuring cognitive impairment using a test of visual scene comprehension. Asia Pacific Conference on Vision, Osaka, Japan, 2019.

Costela F, Reeves S, Kwon M, Woods R. Orientation of preferred retinal locus is maintained following changes in simulated scotoma size. Association for Research in Vision and Ophthalmology, Vancouver, Canada, 2019.

Reeves S. Effects of background music and noise on cognitive performance in musicians and non-musicians. 13th International Symposium of Cognition, Logic, and Communication, Riga, Latvia, 2018.

Reeves S, Pantaleeva M. Role of motivation in learning a second language for intercultural competence development. III International Forum on Teacher Education, Kazan, Russia, 2017.

Peer Reviews

Scientific Reports