

**Zoe Loh**

[zloh@ucmerced.edu](mailto:zloh@ucmerced.edu)

510-709-6180

## **Education:**

University of California, Merced

Ph.D. in Management of Complex Systems (Expected May 2026)

University of California, Merced

M.S. in Management of Complex Systems (December 2023)

University of California, Davis

Bachelor of Science in Cognitive Science with Highest Honors, minor in Psychology (June 2021)

## **Conference Presentations:**

\*asterisks denote undergraduate researchers under my supervision

- **Loh, Z.**, Zand, G., & Arif, A.S. (2025). An Exploratory Study of User Perceptions of Information Across Social Media Platforms. Graphics Interface Conference. Kelowna, BC. Talk.
- Terasaki, G.M., **Loh, Z.**, Arjmand, A., Nguyen, R., & Kumfert, G. (2024). ECG Classification: Identifying Abnormalities by Leveraging Data for Diagnostic Accuracy. Society for Industrial and Applied Mathematics. Georgia, AL. Poster.
- **Loh, Z.** & Castro, S.C. (2024). Cognitive Workload for Disaster Evacuation Training. Management of Complex Systems Department. Merced, CA. Talk.
- **Loh, Z.**, Hosseinpour, H., Padilla, L., & Castro, S.C. (2023). Comparisons of Physical and Digital Media's Effect on Recall: Physiological and Subjective Measures. Psychonomic Society. San Francisco, CA. Poster.
- Canas, X\*, **Loh, Z.**, & Castro, S.C. (2023). Extrinsic Motivation's Influence on Memory Performance Online vs. In-person Recall Tasks. Object Perception, Attention, and Memory Conference. San Francisco, CA. Poster.
- **Loh, Z.**, Hosseinpour, H., Padilla, L., & Castro, S.C. (2023). Information Presentation Congruence: Physiological and subjective comparisons of social media content's effect on recall. Object Perception, Attention, and Memory Conference. San Francisco, CA. Poster.
- **Loh, Z.**, Crosby, A., Kurniawan, S., & Castro, S.C. (2023). Toward Evacuation Training in Virtual Reality: Requirements Gathering for Wildfire Experiences. Human Factors and Ergonomics Society. Washington, DC. Poster
- **Loh, Z.**, Hosseinpour, H., Padilla, L., & Castro, S.C. (2022). Physiological and Perceived Processing and Recall of Information From Social Media Scrolling Feeds. Psychonomic Society. Boston, MA. Poster.
- **Loh, Z.**, Hosseinpour, H., Padilla, L., & Castro, S.C. (2022). Physiological and Perceived Processing and Recall of Information From Social Media Scrolling Feeds. Rocky Mountain Psychological Association. Salt Lake City, UT. Poster.
- **Loh, Z.**, Hall, E.H., Cronin, D.A., & Henderson, J.M. (2021). Assessing the Influence of Task and Working Memory Capacity on Eye Movement Characteristics During Scene-Perception. Western Psychological Association. Virtual. Poster.
- **Loh, Z.**, Hall, E.H., Cronin, D.A., & Henderson, J.M. (2021). Assessing the Influence of Task and Working Memory Capacity on Eye Movement Characteristics During Scene-Perception. UC Davis Undergraduate Research Center. Virtual. Talk.
- **Loh, Z.**, Hall, E.H., Cronin, D.A., & Henderson, J.M. (2021). Assessing the Influence of Task and Working Memory Capacity on Eye Movement Characteristics During Scene-Perception. UC Davis Department of Psychology. Virtual. Poster.

- **Loh, Z.,** Hall, E.H., & Henderson, J.M. (2020). Exploring Differences in Working Memory as a Predictor of Eye Movement Behavior. UC Davis Undergraduate Research Center. Virtual. Talk.

### **Manuscripts:**

- Loh, Z., Crosby, A., Kurniawan, S., & Castro, S. C. (2023). Toward Evacuation Training in Virtual Reality: Requirements Gathering for Wildfire Experiences. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 67(1), 1989-1994. <https://doi.org/10.1177/21695067231192209>
- Loh, Z., Hall, E.H., Cronin, D.A., & Henderson, J.M. (2022). Working memory control predicts fixation duration in scene-viewing. *Psychological Research*.

### **Preprints:**

- Hall, E., Loh, Z., & Henderson, J. M. (2024, December 17). Objects in focus: How object spatial probability underscores eye movement patterns. <https://doi.org/10.31234/osf.io/k8b9s>

### **Awards and Honors:**

- UC President's Dissertation Year Fellowship (2025)
  - Award of \$34,000 to support conducting dissertation research
- Management of Complex Systems Department Summer Fellowship (2025)
  - Award of \$8000 to support conducting research during the summer term
- Management of Complex Systems Department PhD Student Grant (2025)
  - Award of \$2000 to support costs of presenting at a conference
- Management of Complex Systems Department PhD Student Service Award (2024)
  - Award of \$500 for exemplary service to the department and campus community
- Management of Complex Systems Department PhD Student Grant (2023)
  - Award of \$1000 to support costs of presenting at a conference
- Graduate Fellowship Incentive Program Award (2022)
  - Award of \$200 for applying to large external fellowship
- J. Frank Yates Student Conference Award (2022)
  - Award of \$1,000 to support participation in the Psychonomics Annual Meeting
- Management of Complex Systems Department PhD Student Grant (2022)
  - Award of \$484 to support costs of presenting at a conference
- Graduate Fellowship Incentive Program Award (2021)
  - Award of \$200 for applying to large external fellowship
- Cognitive Science Outstanding Senior (2021)
  - One of two seniors in the program selected for exemplary scholarship
- Cognitive Science Citation for Outstanding Performance (2021)
  - Department award for academic performance
- Virtual Undergraduate Travel Award (2021)
  - Award of \$90 to present virtually at a conference
- Pepsi Non-Athletic Scholarship (2020)
  - Award of \$2,500 for academic merit
- Provost Undergraduate Fellowship Award (2020)
  - Award of \$823 for conducting an independent research project
- Dean's Honor List

### **Research Experience:**

**Graduate Student Researcher**, Divergence of Perceived Workload and Performance (January 2025- Present)

Dr. Spencer Castro, Assistant Professor of Management of Complex Systems, UC Merced

- Conducted literature review
- Designed and created experiment using the Gorilla experiment platform

**Graduate Volunteer**, An Exploratory Study of User Perceptions of Information Across Social Media Platforms (January 2024- May 2025)

Dr. Ahmed Arif, Associate Professor of Computer Science and Engineering, UC Merced

- Conducted literature review
- Designed and created online experiment
- Managed data collection
- Performed statistical analysis of behavioral data in R

**Graduate Student Researcher**, Virtual Reality Simulation Training for Wildfire Evacuation (February 2022- Present)

Dr. Spencer Castro, Assistant Professor of Management of Complex Systems, UC Merced

Dr. Sri Kurniawan, Professor of Computational Media Department, UC Santa Cruz

- Conducted thematic analysis of interview data
- Created Qualtrics survey
- Storyboarded virtual reality scenario
- Set up virtual reality equipment for user testing

**Graduate Student Researcher**, Comparisons of Physical and Digital Media's Effect on Recall: Physiological and Subjective Measures (August 2021- December 2023)

Dr. Spencer Castro, Assistant Professor of Management of Complex Systems, UC Merced

- Set up eye tracking equipment
- Conducted literature review
- Developed experimental procedure
- Prepared stimuli
- Performed statistical analysis of behavioral data in R
- Performed cleaning and analysis of eye tracking data in R

**Honors Thesis Student**, Exploring Differences in Working Memory as a Predictor of Eye Movement Behavior (September 2019- June 2021)

Dr. John Henderson, Professor of Psychology, UC Davis

- Organized dataset of individual difference measures
- Cleaned large dataset (n = 100) of eye tracking data
- Performed statistical analysis of psychophysical and eye-tracking data using Python and R
- Conducted literature review

**Research Assistant**, Meaning Mapping Study (June 2020-September 2020)

Dr. John Henderson, Professor of Psychology, UC Davis

- Prepared stimuli
- Modified an existing code pipeline in Python and Matlab
- Managed online surveys through the Qualtrics interface
- Developed tutorial for lab members using the same pipeline in the future

**Research Assistant**, Investigating Free Recall of Highly Similar Scene Stimuli (January 2019- June 2019)

Dr. John Henderson, Professor of Psychology, UC Davis

- Coded video data of outputs of visual free recall (drawings)
- Analyzed the temporal frequency of errors in recall using Python

## **Other Experience:**

**Deputy Team Lead**, Data Science Challenge 2023 (July 2023)

Lawrence Livermore National Lab

- Helped lead a team of 3 undergraduate students
- Applied different machine learning classifiers to electrocardiogram (ECG) data
- Presented poster of findings

## **Mentoring:**

Abhinav Hemmady, Undergraduate Research Assistant (2025- present)

Shriya Shankar, Undergraduate Research Assistant (2025- present)

Erik Cisneros, Undergraduate Research Assistant (2025- present)

Eva Devanathan, Undergraduate Research Assistant (2023- 2024)

Hana Ruiz, Undergraduate Research Assistant (2022- 2023)

Eileen Blanchard, Undergraduate Research Assistant (2022- 2023)

Kaylee Davis, Undergraduate Research Assistant (2021- 2023)

Xavier Canas, Undergraduate Research Assistant/ Lab Manager (2021- 2023)

Isabella Quiroz, Undergraduate Research Assistant (2021- 2022)

Jessica Rodriguez, Undergraduate Research Assistant (2021)

## **Guest Lectures:**

Data Transformation in R, Data Analysis and Optimization, February 5, 2024

Data Visualization in R, Data Analysis and Optimization, March 7, 2022

## **Teaching Experience:**

**Teaching Assistant**, Cognitive Engineering, Dr. Spencer Castro, Spring 2025

**Teaching Assistant**, Data Analysis and Optimization, Dr. Spencer Castro, Spring 2022, 2024, 2025

**Teaching Assistant**, Introductory Data Analytics, Dr. Alex Petersen, Fall 2024

**Teaching Assistant**, Law, Policy, and Risk Management, Dr. Crystal Kolden, Spring 2022

## **Service:**

Conference Organizer, Management of Complex Systems Department Conference, Spring 2024

Graduate Social Chair, Management of Complex Systems Department, Spring 2024

Brownbag Organizer, Management of Complex Systems Department, Fall 2023

## **Professional Activity:**

Ad Hoc Reviewer, Transactions on Affective Computing (2024-present)

Ad Hoc Reviewer and Member, Human Factors and Ergonomics Society (2023-present)

Vice President, R, Artificial Intelligence, and Statistics Education (2023- present)

Member, SPARK Society (2022- present)

Executive Director of Finance and Planning, Professional Networking and Diversity Outreach, UC Merced (2021- 2023)

Member, Women in Science and Engineering (WiSE), UC Davis (2019- 2021)

Member, Asian American Association, UC Davis (2017- 2021)