LIAM KETTLE, M.S.

Ph.D Candidate - User Experience Researcher

🎓 EDUCATION

2024

PhD., Human Factors & Applied Cognition Psychology
George Mason University — 📍 Fairfax, VA

2022

M.A., Human Factors & Applied Cognition Psychology
George Mason University — 📍 Fairfax, VA

2020

M.S., Psychology
University of Otago — 📍 Otago, New Zealand

2018

B.S.(Hons), Psychology
University of Otago — 📍 Otago, New Zealand

💻 RESEARCH EXPERIENCE

Current | 2020

Graduate Research Assistant
George Mason University — 📍 Fairfax, VA

- Identified 29 key insights and recommendations for effective communication between autonomous vehicles and drivers through a systematic review of 31 articles and analyzing 8500+ comments across 128 participants.

2023 | 2023

Summer Research Assistant
George Mason University — 📍 Fairfax, VA

- Identified 5+ areas for improvement towards creating a testbed for human-machine teaming in space operations through conducting an experimental study with 20 participants.
- Analyzed quantitative measures using R to provide a proof-of-concept in support of future grants towards human-machine teaming.
- Collaborated with the United States Air Force Academy and mentored 2 cadets in end-to-end research.

2020 | 2018

Researcher
University of Otago — 📍 Otago, New Zealand

- Developed STI-SIM driving simulations and regressed behavioral changes on quantitative survey data of 100+ participants using SPSS to identify distinct youth driver risk factors across visibility conditions.
- Systematically identified 40+ crash contributing factors at rail level crossings across New Zealand and Australia through thematic analysis of investigation reports and Subject Matter Expert survey.

👤 TEACHING EXPERIENCE

2020 | 2018

Psychology Teaching Assistant
University of Otago — 📍 Otago, New Zealand

- Taught over 70 undergraduate students across 3 class laboratories, graded 100% of student assignments, and provided constructive feedback for students
- Evaluated over 50 novel system designs across various applications of Human Factors and provided recommendations for future accident analyses.

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in linkedin.com/in/liam-kettle
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UX METHODS

Experimental design
Survey development & design
User testing
User interviews
Usability evaluations
Hypothesis testing
Competitor analysis
Participant recruitment
Data visualization

STATISTICAL ANALYSES

ANOVA
Regression
Exploratory data analysis
Correlation
Psychometrics
Qualitative analysis

CODING / TOOLS

R
SPSS
SQL
Qualtrics

📖 SELECTED PUBLICATIONS & PROCEEDINGS

Kettle, L., Herrera, K.M.G., Pithayarungsarit, P., Simpson, K.L., Sharifi, K., & Lee, Y-C. (Under Review). Exploring a Framework of Contextual Vehicle-Human Communication Features Across Driving Contexts to Enhance Situation Awareness and Trust N/A

Kettle, L., McCarty, M.M., Simpson, K.L., & Lee, Y-C. (Under Review). Impact of Monitoring Requests on Publics' Assignment of Blame and Praise towards Level 3-equipped Vehicles. N/A

Kettle, L., & Lee, Y-C. (2023). User Experiences of Well-being Chatbots. *Human Factors*

Kettle, L., & Lee, Y-C. (2022). Augmented Reality for Vehicle-Driver Communication: A Systematic Review. *Safety*

🏅 SELECTED AWARDS

• George Mason University Presidential Scholarship (2024)

• HFES Emerging Leader Program (2023)

• HFES Student Member with Honors (2023)

• University of Otago Master's Research Scholarship (2019)

👤 PROFESSIONAL SERVICE & LEADERSHIP

Current | 2022

Leadership Development Committee Member
Human Factors and Ergonomics Society

• Tasked with the further development of leadership resources and pathways into the organization
• Reviewed existing literature; conducted interviews to identify user needs

2023

HFES Host Committee Member
Human Factors and Ergonomics Society

• Organized events and activities for academic, industry, and government attendees for the HFES annual meeting

2022 | 2021

Student Chapter President
Human Factors and Ergonomics Society

• Elected leader for student chapter with 9 members and responsible for continuing active engagement with local and national organizations
• Organized 17 events including 10 guest speakers for information dissemination, recruitment, and mentorship