LIAM KETTLE, M.S.

PhD Candidate - Human Factors and 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
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2020

Graduate Research Assistant
George Mason University
📍 Fairfax, VA

- Enhanced driver safety awareness by advocating key recommendations for effective vehicle-human communication to industry, government, and academic stakeholders through a systematic review and thematic analysis of 8500+ responses.
- Increased potential for product growth by presenting actionable recommendations to external stakeholders through task, competitor, and heuristic analysis, 5+ user interviews, and iterative prototyping to explore users' behaviors and motivations.
- Published strategic recommendations to improve accessibility, communication style, and user experiences of mental health AI chatbots via parallel studies analyzing 19 user interviews and over 1,500 comments from online public forums.
- Enabled research growth through the management and mentoring of 20+ researchers over 7 projects through all phases of research, from study design (literature reviews and planning), data collection (in-person and online recruitment), analysis (thematic analysis, ANOVA, regression), and report writing.
- Published 5+ articles incorporating statistics expertise using SPSS and R software to analyze quantitative (ANOVA, regression, psychometrics) and qualitative (thematic analysis) data including structured and unstructured surveys, performance metrics, and usability tests.

2023

Summer Research Assistant
George Mason University
📍 Fairfax, VA

- Enhanced research protocol effectiveness by advocating 5+ areas for improvement to stakeholders towards creating a novel testbed for human-machine teaming in space operations.
- Strengthened support for securing future grants towards human-machine teaming through successful implementation of proof-of-concept experimental research.
- Collaborated with the United States Air Force Academy and mentored 2 cadets in end-to-end research leading to their successful presentation to stakeholders and conference submission.

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📞 571-253-5249
🔗 liamkettle.com
in linkedin.com/in/liam-kettle
○ github.com/LiamKettle

UX METHODS

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

STATISTICAL ANALYSES

ANOVA
Correlation
Exploratory data analysis
Psychometrics
Qualitative analysis
Regression

CODING / TOOLS

Figma
Qualtrics
R
SPSS
SQL

*Made with the R packages **pagedown** and **datadrivencv**.*

The source code is available on github.com/LiamKettle/resume.

Last updated on 2023-11-10.

Researcher
2020
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2018

University of Otago

📍 Otago, New Zealand

- Enhanced road safety understanding of youth driver risk factors through the development of driving simulations coupled with SPSS regression analysis on survey data.
- Advocated policy changes and safety initiatives at rail level crossings through systematically identifying 40+ crash contributing factors at rail level crossings across New Zealand and Australia via thematic analysis of investigation reports and Subject Matter Expert survey.

📖 SELECT PUBLICATIONS

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. *Transportation Research Part C*.

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. *Human Behavior and Emerging Technologies*.

Kettle, L., & Lee, Y-C. (2023). User Experiences of Well-being Chatbots. *Human Factors*. https://doi.org/10.1177/00187208231162453

Kettle, L., & Lee, Y-C. (2022). Augmented Reality for Vehicle-Driver Communication: A Systematic Review. *Safety*. https://doi.org/10.3390/safety8040084

🏅 SELECT AWARDS

- HFES Emerging Leader Program (2023)

- HFES Student Member with Honors (2023)

- George Mason University Presidential Scholarship (2020, 2021, 2022, 2023)

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

👤 PROFESSIONAL SERVICE & LEADERSHIP

Leadership Development Committee Member
Current
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2022

Human Factors and Ergonomics Society

- Enhanced long-term professional and student leadership development across the HFES organization by increasing available workshops and expanding resources through reviewing existing literature and conducting interviews to identify user needs.
- Established a dedicated community for 175+ students and early career professionals that foster collaboration, learning, and communication.

UX Club Manager
2023
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2022

George Mason University

- Founded a UX community for graduate students to learn UX research and methodologies.

HFES Host Committee Member
2023

Human Factors and Ergonomics Society

- Enhanced accessibility and awareness of the HFES conference through organizing collaborative activities and events for academic, industry, and government attendees.

2022
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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.
- Successfully organized 17 events including partnering with 10 guest speakers to enhance information dissemination, recruitment, and mentorship.