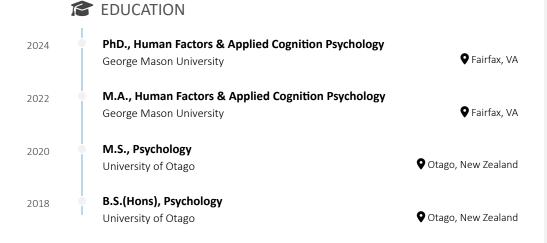
# LIAM KETTLE, M.S.

Ph.D Candidate - User Experience Researcher



# RESEARCH EXPERIENCE

Current 2020

#### **Graduate Research Assistant**

George Mason University

Pairfax, VA

- Provided insights and recommendations for augmented reality visualizations for effective communication between autonomous vehicles and drivers through a systematic review of
- Identified actionable recommendations to improve in-app navigation for feature accessibility through competitor analysis, user interviews, and iterative prototyping for a meal-kit delivery service application
- Increased potential for product growth in identifying means to better group ordering for college students by conducting usability experiments of food delivery applications to explore users' behaviors and motivations
- Advocated user-centric, data-driven decisions for a social justice platform to improve multi-disciplinary collaboration and communication by gathering insights about stakeholders' needs and attitudes

2020 2018

#### Researcher

University of Otago

- Otago, New Zealand
- Develop driving simulations using STI-SIM to investigate youth driver behavior in adverse weather conditions within New Zealand, measuring automotive metrics including driver speed, lane maintenance, and headway distances.
- Analyze driver speed, lane maintenance, and headway distances, and regressed behavioral changes on qualitative survey data including driver violations, lapses, errors, risk-taking propensity, anger, and sensation-seeking.



2020 2019

#### **Psychology Laboratory Demonstrator**

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

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in linkedin.com/in/liam-kettle

github.com/LiamKettle

### **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

**Psvchometrics** 

Qualitative analysis

# CODING / TOOLS

R SPSS

SQL

Qualtrics

Made with the R packages pagedown and datadrivency.

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

> > Last updated on 2023-06-28.

#### **Cognitive Engineering Teaching Assistant**

University of Otago

Otago, New Zealand

• Evaluated over 50 novel system designs across various applications of Human Factors and provided recommendations for future accident analyses



# ■ SELECTED PUBLICATIONS & PROCEEDINGS

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

Kettle, L., Melles, L., & Simpson, K. (2022). Moderation Analysis of Gender in Social Robot Interactions. In Proceedings of the 66th Human Factors and Ergonomics Society International Annual Meeting.

Kettle, L., & Lee, Y-C. (2021). "Welcome to your Daily Wellness Check": The Proposed Evaluation of a SMS-based Conversational Agent for Managing Health and Well-being. In Proceedings of the 65th Human Factors and Ergonomics Society International Annual Meeting.

Andersson, L., Ayala, A., Chan, S., Hickerson, K., Kettle, L., Malcein, L., & Lee, Y-C. (2021). User Experience and Analysis of an Autonomous Shuttle Service. In Proceedings of the 7th International Conference on Vehicle Technology and Intelligent Transport Systems.

# SELECTED AWARDS

- Human Factors and Ergonomics Society Student Travel Award (2021)
- 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

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

2021 2020

#### **Student Chapter First-year Liaison**

**Human Factors and Ergonomics Society** 

• Facilitated new student integration into the graduate program