CONNOR **ESTERWOOD**

741 Peninsula Ct. Ann Arbor, MI 48105 · 865-257-9203

cte@umich.edu | https://hydr.in/m6v3

EDUCATION

COMPLETED :: 2013

BA – INTERNATIONAL RELATIONS, UNIVERSITY OF NORTH CAROLINA, ASHEVILLE

Advisor: Dr. Surain Subramaniam

COMPLETED :: 2018

MS – INFORMATION SCIENCE, UNIVERSITY OF TENNESSEE, KNOXVILLE

Advisor: Dr. Dania Bilal
Committee: Dr. Dania Bilal, Dr. Carol Tenopir, Dr. Diane Kelly

PROJECTED :: 2024

PH.D. – INFORMATION, - UNIVERSITY OF MICHIGAN, ANN ARBOR

Advisor: Dr. Lionel P. Robert

RESEARCH EXPERIENCE

2020 - PRESENT

HUMAN-ROBOT TRUST REPAIR

:: PI – CONNOR ESTERWOOD ::

- Conducted empirical research examining the effects of anthropomorphism and repair strategy on ability, benevolence, and integrity.

- Developed a hybrid online/VR simulated human-robot teaming task.

2019 - PRESENT

PERSONALITY & HUMAN-ROBOT INTERACTION

- Conducted a series of systematic meta-analyses examining the role of personality and acceptance in HRI

2019 - 2021

SCENARIO AND SIMULATION DESIGN FOR MULTI-AGENT TEAMS

:: PI – BOGDAN EPUREANU ::

- Developed and tested a prototype situational awareness based adaptive interface for managing heterogeneous multi-agent teams in an emergency response scenario.

- Developed physiological measures focused on situational awareness and cognitive load via pupillometry and heart rate.

2018-2020

TRUST IN AUTONOMOUS VEHICLES

:: PI – Prof. Lionel Robert, Prof. Dawn Tilbury, Prof. Jessie Yang ::

- Conducted a user study examining the impact of error type on trust and situational awareness in semi-autonomous vehicles.
- Conducted a user study examining how personality similarity impacts user's perceptions of safety in autonomous vehicles.

2018-2019

ACCEPTANCE OF SEMI-AUTONOMOUS BUSES IN THE USA

:: PI – Prof. Lionel Robert & Prof. Jessie Yang ::

- Designed, developed, and analyzed the results of a nationwide survey examining what factors influence semi-autonomous bus adoption in the USA.

RESEARCH INTERESTS

- Human-Robot Interaction
- Teaming
- Trust & Trustworthiness

- Social Computing
- Collective Intelligence
- Organizational Technology

JOURNAL PUBLICATIONS

Esterwood, C., & Robert, L. P. A Systematic Review of Human and Robot Personality in Health Care Human-Robot Interaction. Frontiers in Robotics and AI, 306.

Esterwood, C., Yang, X. J., & Robert, L. P. (2021). Barriers to AV Bus Acceptance: A National Survey and Research Agenda. International Journal of Human–Computer Interaction, 1-13.

Esterwood, C., & Robert, L. (2021). Robots and COVID-19: Re-imagining human-robot collaborative work in terms of reducing risks to essential workers. ROBONOMICS: The Journal of the Automated Economy, 1, 9-9.

Azevedo-Sa, H., Zhao, H., **Esterwood, C.**, Yang, X. J., Tilbury, D. M., & Robert Jr, L. P. (2021). How internal and external risks affect the relationships between trust and driver behavior in automated driving systems. Transportation research part C: emerging technologies, 123, 102973.

Azevedo-Sa, H., Jayaraman, S., **Esterwood, C**., Yang, X. J., Robert, L. P. and Tilbury, D. (2020). Real-Time Estimation of Drivers 'Trust in Automated Driving Systems, International Journal of Social Robotics.

Robert Jr, L. P., Alahmad, R., **Esterwood, C.,** Kim, S., You, S., & Zhang, Q. (2020). A Review of Personality in Human–Robot Interactions. Foundations and Trends® in Information Systems, 4(2), 107-212. Top 10 SSRN Download List: April 2020 & July 2020

Abiri, R., Borhani, S., Kilmarx, J., **Esterwood, C.**, Zhao, X. Jiang, Y. (2020) Towards a User-Centered framework: A Statistical Approach on EEG-Based Computer Cursor Control Using Imagined Body Kinematics Paradigm. IEEE Transactions on Human Machine Systems.

CONFERENCE PROCEEDINGS

Esterwood, C., Essenmacher, K., Yang, H., Zeng, F. and Robert, L. P. (2021). Birds of a Feather Flock Together: But do Humans and Robots? A Meta-Analysis of Human and Robot Personality Matching, Proceedings of 30th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2021)

Esterwood, C. and Robert, L. P. (2021). Do You Still Trust Me? Human-Robot Trust Repair Strategies, Proceedings of 30th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2021).

Esterwood, C., Essenmacher, K., Yang, H., Zeng, F., & Robert, L. (2021). A Meta-Analysis of Human Personality and Robot Acceptance in Human-Robot Interaction. The 2021 ACM CHI Virtual Conference on Human Factors in Computing Systems (CHI `21).

Esterwood, C. and Robert, L. P. (2020). Personality in Healthcare Human Robot Interaction (H-HRI): A Literature Review and Brief Critique. In Proceedings of the 8th International Conference on Human-Agent Interaction (HAI '20), November 10–13, 2020, Virtual Event, NSW, Australia.

Esterwood, C. and Robert, L. P. (2020). Human Robot Team Design, Proceedings of the 8th International Conference on Human-Agent Interaction, November 10-13, Sydney, Australia. https://doi.org/10.1145/3406499.3418751

Azevedo-Sa, H., Jayaraman, S., **Esterwood, C**., Yang, X.J. and Robert, L. P., and Dawn M. Tilbury. 2020. Comparing the Effects of False Alarms and Misses on Humans 'Trust in (Semi)Autonomous Vehicles. In Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction (HRI 2020), March 23 26, 2020, Cambridge, United Kingdom. ACM, New York, NY, USA.

Zhang, Qiaoning, **Esterwood, Connor**, Yang, X. Jessie, & RobertJr, Lionel P. (2019). An Automated Vehicle (AV) like Me? The Impact of Personality Similarities and Differences between Humans and AVs. Association for the Advancement of Artificial Intelligence 2019 Symposium

Zhao, H., Azevedo-Sa, H., **Esterwood, C.,** Yang, X. J., Robert, L., & Tilbury, D. (2019). Error Type, Risk, Performance, and Trust: Investigating the Different Impacts of false alarms and misses on Trust and Performance. Ground Vehicle Systems Engineering and Technology Symposium. 2019.

AWARDS, HONORS, & GRANTS

Rackham Pre-Candidate Research Grant, University of Michigan ($1,500)	2020
Rackham Travel Grant Award, University of Michigan ($1,050)	2020
UMSI Travel Grant ($350)	2020

PROFESSIONAL SERVICE

International Journal of Human-Computer Interaction	2020 - Present
IEEE Transactions on Human-Machine Systems	2021
International Symposium on Robot and Human Interactive Communication (RO-MAN)	2021
ACM/IEEE International Conference on Human-Robot Interaction	2021

International Conference on Information Systems	2020
IEEE Transactions in Neuroscience	2020
ACM/IEEE International Conference on Human-Robot Interaction	2020
Reviewer, Transportation Research Part C	2020
Reviewer, AIS Transactions on Human-Computer Interaction	2019
Reviewer, European Conference on Information Systems (ECIS)	2019
Reviewer, International Conference on Design Science Research in Information Systems and Technology (DESRIST)	2019

PROFESSIONAL AFFILIATIONS

Student Member, ACM	2018—Present
Student Member, IEEE	2020-Present