# MENGYAO LI, PhD

Assistant Professor, School of Psychology

CURRICULUM VITAE — 2025

Georgia Institute of Technology, School of Psychology 654 Cherry St NW, Atlanta, GA, 30332 mengyao.li@gatech.edu, mengyaoli.me

2023 - Present

## **EMPLOYMENT**

Georgia Institute of Technology, Atlanta, GA	
Research Intern, Honda Research Institute, San Jose, CA	2022
Research Intern, Waymo, Mountain View, CA	2021
EDUCATION	
University of Wisconsin-Madison, Madison, WI	2019 - 2023
Ph.D. & M.S. in Industrial and System Engineering (Human Factors)	
Yonsei University, Seoul, Korea	2016
Summer program in Psychology and Physics	
Agnes Scott College, Decatur, GA	2015 - 2018
B.A. in Psychology and Mathematics, Summa Cum Laude	

#### **GRANTS**

#### **CURRENT:**

# **Bio-Behavioral Team Dynamics Measurement System (BioTDMS)**

Sponsor: DOD DARPA OP TEMPO

Total Amount: \$4,164,262 Li's Amount: \$613,247 (15%)

Period: 2024-2027

Investigators: Jamie Gorman (PI), Nancy Cooke (co-I), Mengyao Li (co-I), Michael Rosen (co-I), Bethany

Bracken (co-I), Aaron Winder (co-I)

# Trust Contagion Modeling in Multi-Human Multi-UAS Teams

Sponsor: Georgia Tech Research Institute (GTRI)

Total Amount: \$60,000 Period: 2024-2025

Investigators: Mengyao Li (PI), Theresa Kessler (PI)

# **HONORS & AWARDS TO ME**

Smithgall-Watts Early Career Faculty Award	2024
HFES Alphonse Chapanis Best Student Paper Award	2022
HFES Student Member with Honors	2022
Best Student Paper, 2nd place in HFES Cognitive Engineering Technical Group	2020
Best Paper Award, AutomotiveUI	2019
Miriam Drucker Award, Agnes Scott College	2019
PSI CHI Regional Research Award, Southeastern Psychological Association	2019
Advantage Award, Agnes Scott College	2018
Emily Dexter Award, Agnes Scott College	2018
Goizueta Foundation STEM Funding, Agnes Scott College (\$5,000)	2017
Summit Scholarship, Agnes Scott College	2016
Dean's List, Agnes Scott College	2015 - 2018
International Student Grand, Agnes Scott College	2015 - 2018
Agnes Scott Honor Scholarship, Agnes Scott College	2015 - 2018

#### **HONORS & AWARDS TO STUDENTS**

Emanuel Rojas, HFES Augmented Cognition Technical Group Student Grant Awardee Stephanie Kim, Foley Scholars 2024 Finalists

2024 2024

## **PUBLICATIONS**

## JOURNAL PUBLICATIONS

- J.4. **Li, M.,** Erickson, I., Cross, V., & Lee, J. D. (2023). It's Not Only What You Say, But Also How You Say It: Machine Learning Approach to Estimate Trust in Conversation. *Human Factors*.
- J.3. **Li, M.,** Kamaraj, A.V., & Lee, J.D. (2023). Modeling Trust Dimensions and Dynamics in Human-Agent Conversation: A Trajectory Epistemic Network Analysis Approach. *International Journal of Human-Computer Interaction*, 1-12.
- J.2. Alsaid, A., **Li, M.,** Chiou, E., & Lee, J.D. (2023). Measuring Trust: A Text Analysis Approach to Compare, Contrast, and Select Trust Questionnaires. *Frontier in Psychology, 14, 1192020*.
- J.1. Hughes, J. L., Li, M., McDonnell, E. R. C., Engsberg, E. V., & Goss, C. S. (2019). Invited Editorial: Professors' Research Expectations for Admission to Psychology Graduate Programs. Psi Chi Journal of Psychological Research, 24(1).
- R.3. **Li, M.** & Lee, J.D. (Under review). Purpose outweighs performance: Trust drops more when an AI teammate fails to cooperate, but explanations can repair it. *International Journal of Human-Computer Interaction*.
- R.2. **Li, M.** & Lee, J.D. (Under review). Trusting Voice: Gender Differences in Trust and Cooperation of Conversational Agents *International Journal of Human-Computer Studies*.
- R.1. Rojas, E., Hsu, D., Huang, J., & **Li, M**. (Under review). Interpersonal Influence Matters: Trust Contagion and Repair in Human-Human-AI Team *Human Factors*.

## **BOOK CHAPTERS**

B.1. **Li, M.** & Liu, J. (Under review). Measuring Team Performance through Machine Learning. In Rosen M. & Salas, E. (Eds.), Team performance assessment and measurement: Theory, methods, and applications. Oxford Handbook.

#### **CONFERENCE PROCEEDINGS**

- C.12. Rojas, E., & Li, M. (2024). Trust is Contagious: Social Influences in Human-Human-AI Team. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (September 9-13, 2024).
- C.11. **Li, M.**, Mehrotra, S., Akash, K., Misu, T., & Lee, J. D. (2023). You Cooperate, I Reciprocate: Well-Being and Trust in Automated Vehicles. *IEEE International Conference on Intelligent Transportation Systems* (ITSC 2023). (September 24-28, 2023).
- C.10. **Li, M.**, Noejovich S. I., Cross, E.V., & Lee, J. D. (2023). Explain Trust Divergence: Bifurcation as A Dynamic System. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (October 23-27, 2023).
- C.9. Renata, V., Parker, J., Loganathar, S., Kamaraj, A. V., & Li, M. (2023). Tossing Your Tylenol: Supporting Sustainable Behavior in Medication Disposal Through Label Design. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (October 23-27, 2023).
- C.8. Lee, J., Kamaraj, A.V., **Li, M.**, Domeyer, J. E., Toyoda, H., & Lee, J.D. (2023). Drivers' Glance Behavior During Driver-Initiated Overrides of L2 Driving Automation: A Comparison Between Intentional and Unintentional Overrides. *Transportation Research Board (TRB) 102nd Annual Meeting*. (January 8-12, 2023).
- C.7. **Li, M.,** Erickson, I., Cross, V., & Lee, J. D. (2022, October). Estimating Trust in Conversational Agent with Lexical and Acoustic Features. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (October 9-13, 2022). **Alphonse Chapanis Student Paper Award**

- C.6. **Li, M.** & Lee, J.D. (2022, October). Modeling Goal Alignment In Human-AI Teaming: A Dynamic Game Theory Model. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. (October 9-13, 2022).
- C.5. **Li, M.,** Alsaid A. Noejovich S. I., Cross V., & Lee J.D. (2020, November). Towards a Conversational Measure of Trust. *Proceedings of AAAI Fall Symposium Series 2020: Trust & Explainability in Artificial Intelligence for Human-Robot Interaction.* (November 13-14, 2020).
- C.4. **Li, M.** Katrahmani, A., Kamaraj, A.V., & Lee J.D. (2020, October). Defining Design Space of the Auto-Mobile Office: A Computational Abstraction Hierarchy Analysis. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (October 5-9, 2020). **Best CE TG Student Paper**
- C.3. Kamaraj, A.V., Katrahmani, A., **Li, M.,** & Lee J.D. (2020, October). A Data Analytics Approach to Persona Development for the Future Mobile Office. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting.* (October 5-9, 2020).
- C.2. **Li, M.,** Holthausen, E., Stuck, E., & Walker, N. (2019, September). No Risk No Trust: Investigating Perceived Risk in Highly Automated Driving. *Proceedings of the Eleventh International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (Automotive UI' 2019), Utrecht, Netherlands (September 22-25, 2019). **Best Paper Award**
- C.1. **Li, M.**, Engsberg, E. V., McDonnell, E. R., Goss, C. S., & Hughes, J. L. (2019). Research expectations for clinical vs. industrial/organizational and human factors programs. *Southeastern Psychological Association*, Jacksonville, FL. **Best Undergraduate Poster Award**

#### WORKSHOPS

- W.6. Mehrotra, S., Li, M., Akash, K. (2024, September). What's beyond safety? Workshop on promoting well-being for mobility users in future hybrid societies. In Proceedings of 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutomotiveUI '24) (September 22-25, 2024).
- W.5. **Li, M.** & Rojas, E. (2024, March). Trust Contagion in Human-AI-Robot Team Communication. HRI' 2024 Refining Trust and its Impact in HRI Workshop (March 11, 2024).
- W.4. **Li, M.** & Lee, J.D. (2022, April). Exploring Trust Indicators in Human-Agent Conversation with Epistemic Network Analysis. *CHI-TRAIT 2022 (Workshop on Trust and Reliance in AI-Human Teams)*. (April 30, 2022).
- W.3. **Li, M,** Noejovich, S., Cross, V.. Lee, J. D. (2022, February). Trust Divergence as a Dynamic Process. *NASA 2022 Human Research Program Investigators' Workshop* (HRP IWS 2022). (February 4-10, 2022).
- W.4. Li, M, Noejovich, S., Cross, V.. Lee, J. D. (2022, February). Measuring Trust In Conversation: A Text Analytical Approach. NASA 2022 Human Research Program Investigators' Workshop (HRP IWS 2022). (February 4-10, 2022).
- W.5. Li, M., Erickson, I., Cross, V., & Lee, J. D. (2021, February). Estimating Trust in Human-Agent Conversation. NASA 2022 Human Research Program Investigators' Workshop (HRP IWS 2021). (February 1-4, 2021).
- W.1. Li, M. & Lee J.D. (2020, January). Trust in Voice: A Three-Level Conversational Analysis to Measure Trust in Virtual Assistants. NASA 2020 Human Research Program Investigators' Workshop (HRP IWS 2020), Galveston, TX (January 27-30, 2020).

#### **INVITED TALKS**

Georgia Tech, School of Psychology, Growing Up in Science	2023
Invited speaker, "Growing Up in Science: Bridging Engineering and Psychology"	
Georgia Tech, Institute of People and Technology	2023
Seminar speaker, "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	
Georgia Tech, School of Psychology	2023
Seminar speaker, "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	
University of Michigan, Industrial and Operations Engineering	2023
Seminar speaker. "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	

Iowa State University, Industrial and Manufacturing Systems Engineering Department	2022
Seminar speaker, "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	
George Mason University, Department of Psychology	2022
Seminar speaker, "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	
University at Buffalo, Industrial and System Engineering Department	2022
Seminar speaker, "Measure, Model, and Manage Trust in Human-AI Communication and Cooperation"	

## **TEACHING**

## Georgia Tech, as the instructor

Course	Title	Semester	Size	
PSY 7101	Engineering Psychology I: Methods	Spring 2025	13	
PSY 7102/4803	Engineering Psychology II: Displays, Controls, and Workspace	Fall 2024	15	
PSY 7101/4803	Engineering Psychology I: Methods	Spring 2024	47	
PSY 8901/8903	Special Problems in Eng Psy/HCI	Spring 2024	7	
	he guest lecturer bot Interaction Design and Research Met Methods for Human Factors and HCI	hod		2024 2023
	onsin Madison Research, Teaching, and Learning aching Assistant, ISyE602: Data Visuali	ization		2020 - 2022 2022
0	ge, as the teaching assistant			
	to Computer Programming nk Like a Data Scientist			2016 - 2019 2016 - 2019

#### **MENTORING**

## PH.D. ADVISEES

Trevor Patten, School of Psychology, Georgia Tech, 2024 - 2029 Shuyuan Liu, School of Psychology, Georgia Tech, 2024 - 2029 Emanuel Rojas, School of Psychology, Georgia Tech, 2023 - 2027

#### THESIS COMMITTEE MEMBERS

## Richard Agbeyibor, Ph.D., 2024

Title: Human-AI Collaboration Aboard Crewed Autonomous Intelligence, Surveillance, and Reconnaissance Aircraft

School of Aerospace Engineering, Georgia Institute of Technology

# David Grimm, Ph.D., 2024

Title: Measuring Dynamic Team Interdependency and Reorganization in Response to Uncertainty School of Psychology, Georgia Institute of Technology

Emily Gleaton, Ph.D., 2020-2025

Title: Supporting Lifelong Autonomy, Vitality, Empowerment, and Resilience through Learning Education and Achievement Framework

School of Psychology, Georgia Institute of Technology

# Reganne Miller, Ph.D., 2022-2028

Title: Pedagogical Agent Preference: Impact on Pedagogical Agent Effectiveness in Two Content Domains

School of Psychology, Georgia Institute of Technology

# Julie Harrison, Ph.D., 2018-2024

School: Collaborative Problem Solving in Human-Robot Teams

Department of Psychology, Georgia Institute of Technology

Yichen Tang, Ph.D., 2019-2024

Title: Define Quiet Quitting in Teams

School of Psychology, Georgia Institute of Technology

## Stephanie Kim, Master, 2024

Title: Designing Longitudinal IntimateHuman-Robot Interaction to Facilitate Self-Extension Human-Computer Interaction, Georgia Institute of Technology

## Dahee Kim, Master, 2024

Title: Designing Multimodal Health Information for Blind or Low Vision (BLV) Patients School of Industrial Design, Georgia Institute of Technology

## Huaizhuo Yang, Master, 2024

Title: Designing Autonomous Vehicle (AV) System to Promote Users' Trust in AV School of Industrial Design, Georgia Institute of Technology

## **MASTER STUDENTS**

Debbie Hsu (Georgia Tech, Human-Computer Interaction)	2023 - Present
Yan Tian (Georgia Tech, Human-Computer Interaction)	2023 - Present
Jingjing Huang (Georgia Tech, Human-Computer Interaction)	2023 - Present
Stephanie Kim (Georgia Tech, Human-Computer Interaction)	2023 - 2024
Saba Alemayehu (Georgia Tech, Human-Computer Interaction)	2023 - 2024
Hannah Agbarogji (Georgia Tech, Human-Computer Interaction)	2023 - 2024
Hiya Sachdev (Georgia Tech, Human-Computer Interaction)	2023 - 2024
Isabel Erickson (UW-Madison, ISyE)	2021 - 2022
Joshua Emory (UW-Madison, ISyE)	2021 - 2022

#### UNDERGRADUATE STUDENTS

Arnav Shah (Georgia Tech, CS)	2024 - Present
Dong Fang (UW-Madison, CS)	2019
Sofia Noejovich (UW-Madison, ISyE)	2020 - 2021
Aditya Tapshalkar (Georgia Tech, CS)	2018 - 2019
Sanghavi Gaddam (Georgia Tech, CS)	2018 - 2019

#### **PROFESSIONAL SERVICE**

#### REVIEWING

**Proposals**: NSF Proposal Reviewers: Cyber-Physical System (CPS), Future Manufacturing, Decision, Risk, and Management Sciences (ad hoc)

**Journals:** Human Factors, Computers in Human Behaviors, Journal of Experimental Psychology: Applied, Cognitive Research: Principles and Implications, International Journal of Human-Computer Studies Applied Ergonomics, Frontiers in Psychology, Risk Analysis, IEEE Transactions on Human-Machine Systems

**Conference:** CHI 2025, IEEE International Conference on Human-Machine Systems (ICHMS'24), International Workshop on Multidisciplinary Perspectives on Human-AI Team Trust, Human Factors and Ergonomics Society (HFES), AutomotiveUI (AutoUI), NASA HRP 2021, AAAI Fall Symposium

# PROGRAM COMMITTEE SERVICE

Editorial Assistant for Journal of Human Factors	2021 - 2023	
Committee, HFES Alphonse Chapanis Best Student Paper Award	2023 - Present	
Event Chair, HFE WOMEN	2022 - 2024	
Co-Chair for HART session, HFES	2022	
Associate Chair, AutomotiveUI	2022, 2023	
Program Chair, MULTITTRUST23: International Workshop on Multidisciplinary Perspectives on		
Human-AI Team Trust	2023	

## UNIVERSITY SERVICE

Search Committee, Georgia Tech, School of Psychology	2024
Curriculum Committee, Georgia Tech, School of Psychology	2023 - Present
Membership Chair, University of Wisconsin-Madison HFES Chapter	2020 - 2023
Mentoring Circles, Agnes Scott College	2021 - 2023