

WAYNE C. W. GIANG

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PROFESSIONAL APPOINTMENTS

<i>Senior UX Researcher, Research Science, Human Centered Design (Contract – TD Bank)</i> Procom	Mar. 2026 – Aug. 2026
<i>Sessional Instructor, Mechanical and Industrial Engineering</i> University of Toronto	Sept. 2025 – Dec. 2026
<i>Affiliated Faculty, Industrial and Systems Engineering</i> Herbert Wertheim College of Engineering University of Florida	Sept. 2025 – Aug. 2026
<i>Assistant Professor, Industrial and Systems Engineering</i> Herbert Wertheim College of Engineering University of Florida	2019 – Aug. 2025
<i>Adjunct Assistant Professor, Industrial and Systems Engineering</i> Herbert Wertheim College of Engineering University of Florida	2018 – 2019

EDUCATION

<i>Ph.D., Industrial Engineering</i> University of Toronto, 2018 Dissertation: <i>Supporting Medical Dispatchers' Understanding of Uncertainty in Short-term Dispatch Decisions</i> Advisors: Birsen Donmez, Russell D. MacDonald Committee: Greg A. Jamieson, Mark Chignell
<i>Masters of Applied Science, Systems Design Engineering</i> University of Waterloo, 2012 Thesis: <i>Application of Crossmodal Relationships in Interfaces for Complex Systems: A Study of Temporal Synchrony</i> Advisor: Catherine M. Burns
<i>Bachelors of Applied Science with Honours Distinction, Systems Design Engineering, Cognitive Science Option</i> University of Waterloo, 2009 Thesis: <i>Interfaces for Facilitating Information Transfer between Shared Digital Tabletop Displays and Individual Tablet Displays for a Naval Planning Scenario</i> Advisor: Stacey D. Scott

AWARDS

NSERC Canada – Postgraduate Scholarship (2012-2015)
NSERC Canada – Alexander Graham Bell Canada Graduate Scholarship (2010-2011)
Ontario Graduate Scholarship (2015-2016)
University of Toronto School of Graduate Studies Conference Grant (2015)
Mechanical and Industrial Engineering – University of Toronto Travel Grant (2014)
University of Waterloo President's Graduate Scholarship (2010-2011)
Vale Inco Ltd. Workterm Report Award (2008)
Faculty of Engineering Entrance Scholarship (2004)

PUBLICATIONS AND PRESENTATIONS

Journal Articles (supervised student names are in bold; *corresponding author)

1. **Rajkhan, A.**, Giang, W.C.W.* (2025). Automated driving training: a scoping review examining the use of instructional design and learning principles in current training research. *Transportation Research Part F: Traffic Psychology and Behavior*.
2. **Zheng, H.**, Mason, J.R., Classen, S., Giang, W.C.W.* (2025). Investigating the impact of roles and responsibilities training on adaptive cruise control comprehension and usage: A comparison of young and older adults in a driving simulator study. *Transportation Research Part F: Traffic Psychology and Behavior*.
3. Classen, S.*, Giang, W. C. W., **Rajkhan, A.**, **Zheng, H.**, Gibson, B., Patel, B., Winter, S., Jeghers, M., Li, Y., & Ramirez-Zamorac, A. (2024) A randomized controlled trial on automated vehicle technologies for drivers with Parkinson's Disease. *Occupational Therapy Journal of Research*. 15394492241271115.
4. Giang, W.C.W., **Zheng, H.**, Gibson, B., Patel, B., Ramirez-Zamora, A., Winter, S., Jeghers, M., Li, Y., Classen, S.* (2023). Does in-vehicle automation help individuals with Parkinson's disease? A preliminary analysis. *Frontiers in Neurology: Neurorehabilitation*, 14, <https://doi.org/10.3389/fneur.2023.1225751>.
5. **Zheng, H.**, Mason, J., Classen, S., Giang, W.C.W.* (2023). Pilot study: Effect of roles and responsibility training on driver's use of adaptive cruise control between younger and older adults. *Transportation Research Part F: Traffic Psychology and Behavior*, 94, 53-66.
6. Luo, Y., Grimaldi, N., **Zheng, H.**, Giang, W.C.W., Hu, B.* (2022). Distraction from Smartphones Changed Pedestrians' Walking Behaviors in Open Areas. *Motor Control*, 1 AOP, 1-18.
7. Classen, S.*, Winter, S.M., Wei, J., Jeghers, M., Rogers, J., & Giang, W.C.W. (2022). Feasibility of automated in-vehicle technologies on volunteers' driving performance. *Technology and Disability*, 34(4), 233-246.
8. Classen, S.*, Li, Y., Giang, W.C.W., Winter, S., Wei, J., Patel, B., Jeghers, M., Gibson, B., Rogers, J., Ramirez-Zamora, A. (2022). RCT protocol for driving performance in people with Parkinson's using autonomous in-vehicle technologies. *Contemp Clin Trials Commun*, 28;28:100954.
9. **Eskandar, M.**, Giang, W.C.W*., Motamedi, S., Devos, H., Koon, L., Akinwuntan, A., Kondyli, A. (2022). Designing a Reminders System in Highly Automated Vehicles' Interfaces for Individuals with Mild Cognitive Impairments. *Frontiers in Future Transportation – Connected Mobility and Automation*.
10. **Zheng, H.**, Giang, W.C.W.* (2021). Risk Perception and Distraction Engagement with Smart Devices in Different Types of Walking Environments. *Accident Analysis and Prevention*. 162. 106405.
11. Giang, W.C.W.*, **Bland, E.**, **Chen, J.**, Colon Morales, C., Alvarado, M. (2021). User Interactions with Health Insurance Decision Aids: A User Study with Retrospective Think-Aloud. *Journal of Medical Internet Research Human Factors*. 8(4). e27628.
12. Colon Morales, C., Giang, W.C.W., Alvarado, M.* (2021). Informed Decision-making for Health Insurance Enrollment: A Review and Survey Study. *Journal of Medical Internet Research Formative Research*. 5 (8), e27477.
13. Arrabito, G.R.*, Ho, G., Li, Y., Giang, W.C.W., Burns, C.M., Hou, M. (2019). Multisensory Cues for Encoding Urgency of System Hazards: Effect of Operator Experience on Perceived Urgency. *International Journal of Aerospace Psychology*. 29(1). 1-17.
14. Giang, W.C.W., Chen, H-Y.W., Donmez, B.* (2017). Smartwatches vs. Smartphones: Notification Engagement while Driving. *International Journal of Mobile Human-Computer Interaction*. 9(2). 39-57.
15. Giang, W.C.W., Donmez, B.*, Ahghari, M., MacDonald, R.D. (2014). Impact of Precipitation on Interfacility Land Critical Care Travel Times. *Prehospital and Disaster Medicine*. 29(6). 1-7.
16. Giang, W.C.W., Donmez, B.*, Fatahi, A., Ahghari, M., MacDonald, R.D. (2014). Supporting Air versus Ground Vehicle Decisions for Interfacility Medical Transports Using Historical Data. *IEEE Transactions on Human-Machine Systems*, 44(1), 55-65.

Conference Proceeding Papers (supervised student names are in bold; presenter underlined)

Fully Reviewed

1. **Eskander, M.**, Kondyli, A., **Carames, K.**, Giang, W.C.W. (2025). Participatory Design of Emergency Response Systems for Highly Automated Vehicles. *AHFE Hawaii International Conference*, Hawaii, USA, Dec. 8-10,

2025.

2. Mason, J.*, Giang, W. C., Lenneman, J., Hungund, A. P., Pradhan, A., & Singer, J. (2024). Developing a Framework and Identifying Tools to Enhance ADAS Training, Information, and Education. In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 238-241).
3. Kondyli, A.*, Davidson, A., Depcik, C., Haug, J., Koon, L., Motamedi, S., **Eskander, M.**, Giang, W., ... & Devos, H. (2024). Assistive Technology System for Highly Automated Vehicles to Support People with Mild Cognitive Impairment: A Human-Centered Design Approach. *Human Factors in Design, Engineering, and Computing*, 159(159).
4. Giang, W.C.W., Iglar, A., Chignell, M., Samavi, R., Nathan, K. (2023). The Privacy Attitudes Questionnaire (PAQ) Turned 20: What's Next for a Generalized Measure of Privacy Attitudes?. (Panel) In *Proceedings of the 67th Annual Meeting of the Human Factors and Ergonomics Society*, Washington, DC, Oct. 23-Oct. 27, 2023.
5. **Rajkhan, A.A.**, **Eskandar, M.**, Colon-Morales, C., Alvarado, M., Giang, W.C.W. (2023). User's Navigation Strategy and Information Search with Health Insurance Decision Aids Using Social Network Analysis. (Presentation) In *Proceedings of the 67th Annual Meeting of the Human Factors and Ergonomics Society*, Washington, DC, Oct. 23-Oct. 27, 2023.
6. **Carames K.**, **Mui, K.**, **Azad A.**, Giang, W.C.W. (2021). Studying Robot Vacuums Using Online Retailer Reviews to Understand Human-Automation Interaction. (Presentation) In *Proceedings of the 65th Annual Meeting of the Human Factors and Ergonomics Society*, Baltimore, MD, Oct. 4-Oct. 7, 2021. **3rd Place Award for Best Student Paper from the Cognitive Engineering and Decision-Making Technical Group.**
7. **Eskandar, M.**, Giang, W.C.W. (2021). A Preliminary Classification of Different Tasks that Make Use of Uncertainty Visualizations. (Presentation) In *Proceedings of the 65th Annual Meeting of the Human Factors and Ergonomics Society*, Baltimore, MD, Oct. 4-Oct. 7, 2021.
8. **Zheng, H.**, **Campbell, I.**, Giang, W.C.W. (2021). Phone-related Distracted Walking Injuries as a Function of Age and Walking Environment. (Presentation) In *Proceedings of the 65th Annual Meeting of the Human Factors and Ergonomics Society*, Baltimore, MD, Oct. 4-Oct. 7, 2021.
9. **Zheng, H.**, Luo, Y., Hu, B., Giang, W.C.W. (2020). A Comparison of Workload Demands Imposed by Different Distracted Walking Tasks and its Effect on Gait. (Presentation) In *Proceedings of the 64th Annual Meeting of the Human Factors and Ergonomics Society*, Chicago, IL, Oct. 5-Oct. 9, 2020. **Won Best Paper Safety Technical Group.**
10. Luo, Y., **Zheng, H.**, Chen, Y., Giang, W.C.W., Hu, B. (2020). Influences of Smartphone Operations on Gait and Posture During Outdoor Walking Task. (Presentation) In *Proceeding of the 64th Annual Meeting of the Human Factors and Ergonomics Society*, Chicago, IL, Oct. 5th – Oct. 9th, 2020.
11. Akcali, E.*, Giang, W.C.W., Landrum, M. (2020). Incorporating Divergent Thinking Skills Development into a Project-based Course in Industrial and Systems Engineering. (Presentation). Paper presented at 2020 ASEE Virtual Annual Conference. **ASEE IED Best Paper Runner Up.**
12. Yang, F., Tianjin, J.Z., Giang, W.C.W., Yerebakan, M., Hu, B. (2019). The Influence of Different Weight Carrying Methods on Human Gait and Balance during Obstacle Negotiation. (Presentation) In *Proceedings of the 63rd Annual Meeting of the Human Factors and Ergonomics Society*, Seattle, WA, Oct. 28-Nov. 1, 2019.
13. Giang, W.C.W., Hui, L., Donmez, B., Ahghari, M., & MacDonald, R.D. (2016). Dispatch Decision Making in an Air Medical Transport System. (Presentation) In *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, Washington D.C., Sept. 19-23, 2016.
14. Giang, W.C.W., Shanti, I., Chen, H-Y.W., Zhou, A., Donmez, B. (2015). Smartwatches vs. Smartphones: A Preliminary Report of Driver Behavior and Perceived Risk while Responding to Notifications. (Presentation) In *Proceedings of the 7th Annual Conference on Automotive User Interfaces and Interactive Vehicular Applications*, Nottingham, U.K. Sept. 1-3, 2015.
15. Giang, W.C.W., Donmez, B. (2015). Interpreting Visualizations of Historical Variability for Estimating Future Events. (Poster) In *Proceedings of International Conference on Naturalistic Decision Making 2015*, McLean, VA, June 9-12, 2015.
16. Giang, W.C.W., Hoekstra-Atwood, L., Donmez, B. (2014). Driver Engagement in Notifications: A Comparison

of Visual-Manual Interaction between Smartwatches and Smartphones. (Presentation) In *Proceedings of the 58th Annual Meeting of the Human Factors and Ergonomics Society*, Chicago, Oct. 27-31, 2014.

17. Hoekstra-Atwood, L., Chen, H-Y.W., Giang, W.C.W., Donmez, B. (2014). Measuring Inhibitory Control in Driver Distraction. (Presentation) In *Proceedings of the 6th Annual Conference on Automotive User Interfaces and Interactive Vehicular Applications*, Seattle, WA, Sept. 17-19, 2014.
18. Saffarian, M., Giang, W. (2013). Improving Perceived Fairness of Task Assignments in Cardiovascular Intensive Nursing Care Unit with Simple Queuing Mechanism. (Presentation) In *Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society*, San Diego, Sept. 30-Oct. 4, 2013.
19. Arrabito, G.R., Ho, G., Li, Y., Giang, W., Burns, C.M., Hou, M., Pace, P. (2013). Multimodal Displays for Enhancing Performance in a Supervisory Monitoring Task: Reaction Time to Detect Critical Events. (Presentation) In *Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society*, San Diego, Sept. 30-Oct. 4, 2013.
20. Giang, W., Burns, C.M. (2012). Sonification Discriminability and Perceived Urgency. (Presentation) In *Proceedings of the 56th Annual Meeting of the Human Factors and Ergonomics Society*, Boston, Oct. 22-26, 2012.
21. Giang, W., Masnavi, E., Burns, C.M. (2011). Perceptions of Temporal Synchrony in Multimodal Displays. (Presentation) In *Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society*, Las Vegas, Sept. 19-23, 2011.
22. Giang, W., Keefe, A. Keillor, J. (2010). Effects of Brightness of Assisted Target Detection Cues in a Simulated Search and Rescue Task. (Presentation) In *Proceedings of the 54th Annual Meeting of the Human Factors and Ergonomics Society*, San Francisco, Sept. 27-Oct. 1, 2010.
23. Giang, W., Keillor, J. (2009). Effects of Cue Saliency in an Assisted Target Detection System for Search and Rescue. (Presentation) In *Proceedings of the 2009 IEEE Toronto International Conference – Science and Technology for Humanity*, Toronto, Canada, Sept. 26-27, 2009.

Abstract Reviewed

1. Giang, W.C.W. (2024) Ways to Build an Inclusive Automated Vehicle User Experience through Training and In-vehicle interfaces – Pre-Conference Institute on Best Evidence, Best Clinical Practice, and Best Real-world applications for Autonomous Vehicles and Robots for People with and without Disabilities. (Presentation) American Occupational Therapy Association, March 20, 2024.
2. Classen, S., Giang, W.C.W. (2024) Impact of AVs on the fitness-to-drive abilities of people with Parkinson's Disease – Pre-Conference Institute on Best Evidence, Best Clinical Practice, and Best Real-world applications for Autonomous Vehicles and Robots for People with and without Disabilities. (Presentation) American Occupational Therapy Association, March 20, 2024.
3. Ma, X., Kim, M., Zheng, H., Giang, W.C.W. (2024) Understanding Visual Scanning Behavior in Driving: A Review and New Perspective Using Statistical Pattern-based Approach. (Poster) Transportation Research Board Annual Meeting, Washington, DC, Jan. 7-11, 2024.
4. Mason, J., Gaspar, J., Carney, C., Giang, W.C.W. (2024) Advanced Driver Assistance System Education and Training: A Conceptual Framework and Best Practices. (Presentation) Transportation Research Board Annual Meeting, Washington, DC, Jan. 7-11, 2024.
5. Koon, L.A., Akinwuntan, A., Bhattacharya, S., Davidow, A., Davidson, A., Depcik, C., Devos, H., **Eskandar, M.**, Giang, W.C.W., Haug, J., Hu, B., Jain, E., Kondyli, A., Kumar, D., Liu Y., Motamedi, S., Yao, H., Zaho, X. (2022) Optimizing Automated Driving Systems for People with Cognitive Impairments. (Presentation) Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) Conference, July, 2022.
6. Motamedi, S., Giang, W.C.W., Bhattacharya, S., Kondyli, A., (2022) Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities. (Poster) Transportation Research Board Annual Meeting – Standing Committee ACH30, Washington, DC, Jan. 9-12, 2022.
7. Giang, W.C.W., Mason, J., **Zheng, H.**, **Rudd, N.**, Classen, S. (2022) Development and Effects of ACC Roles and

Responsibilities Training for Younger and Older Adults. (Presentation) Transportation Research Board Annual Meeting – Standing Committee on Vehicle User Education, Training, and Licensing: ACH60, Washington, DC, Jan. 9-12, 2022.

8. Luo, Y., Zheng, H., Chen, Y., Giang, W.C.W., Hu, B. (2020). Effect of Smartphone Operation on Pedestrians' Gait Performance: An Outdoor Study. (Poster) In proceeding of the 44th Meeting of American Society of Biomechanics, Atlanta, GA, Aug. 4th – Aug. 7th, 2020.
9. Giang, W.C.W., Ponnambalam, C.T., He, X., Donmez, B. (2018). Medical Dispatch Decision Support for Transfer Time Estimation: Individual Operator Differences in System Use. (Poster) Human Factors and Ergonomics in Healthcare 2018, Boston, MA, March 26-28, 2018
10. Giang, W.C.W., Donmez, B., Zakir, A., Ahghari, M., MacDonald, R.D. (2015). Supporting Dispatch Decisions in Interfacility Medical Transfers: Understanding the Roles of Uncertainty and Reliability. (Poster) Human Factors and Ergonomics in Healthcare 2015, Baltimore, MD, April 26-29, 2015.
11. Momtahan, K., Burns, C.M., Sherrard, H., Labinaz, M., Mesana, T., Caves, W., Enomoto, Y., Giang, W., Ho, V., Pajek, D., Saunders, C (2006). Personal Digital Assistants and Decision Support Software: New Mechanisms to Improve Access to Cardiac Care Best Practices. (Poster) e-HEALTH 2006, Victoria, Canada, May 1-4, 2006.

Technical Reports

1. Kondyli, A., Davidson, A., Depcik, C., Koon, L., Motamedi, S., Giang, W.C.W., Hu, B., Jain, E., Zhao, X., Akinwuntan, A., Bhattacharya, S., Devos, H. (2022). Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities: Inclusive Design Challenge Stage II Final Report. Technical report submitted to the Department of Transportation Inclusive Design Challenge.
2. Chen, H-Y.W., Marulanda, S., Hoekstra-Atwood, L., Donmez, B., Giang, W.C.W. (2014). Designing feedback to Induce Safer Driving Behaviors: A Laboratory Study of Driver Characteristics and Susceptibility to Driver Distractions. Technical report submitted to Toyota Collaborative Safety Research Center.
3. Giang, W., Li, Y., Burns, C., Arrabito, G.R. (2013). Baseline and Multimodal UAV GCS Interface Design: Progress Report May, 2011-December, 2011. (DRDC-RDDC-2014-C129). Toronto, Ontario: Defence Research and Development Canada. July, 2013.
4. Giang, W., Masnavi, E., Rizvi, S., Morita, P., Burns, C., Arrabito, G.R. (2011). Baseline and Multimodal UAV GCS Interface Design. (DRDC-RDDC-2014-C128). Toronto, Ontario: Defence Research and Development Canada. December, 2011.
5. Giang, W., Santhakumaran, S., Masnavi, E. Glussich, D., Kline, J., Chui, F., Burns, C., Histon, J., Zelek, J. (2010). Multimodal Interfaces: Literature Review of Ecological Interface Design, Multimodal Perception and Attention, and Intelligent Adaptive Multimodal Interfaces. (DRDC-Toronto-CR-2010-051). Toronto, Ontario: Defence Research and Development Canada. May, 2010.

Theses

1. Giang, W.C.W. (2018). Supporting Transfer Time Predictions in Medical Dispatch using Visualizations of Historical Data. (PhD Dissertation). University of Toronto.
2. Giang, W.C.W. (2012). Applications of Crossmodal Relationships in Interfaces for Complex Systems: A Study of Temporal Synchrony. (Master's Thesis). University of Waterloo.
3. Rampal, A., Liang, S., Giang, W. (2009). Concurrent Individual and Group Information Control System. (Undergraduate Thesis) Systems Design Engineering Annual, pp. 19-20. University of Waterloo.

Invited Conference Presentations (supervised student names are in bold; presenter underlined)

1. Giang, W.C.W., Donmez, B., Ahghari, M., MacDonald, R.D. (2013). Making Medical Transfer Mode Decisions under Time Pressure: Understanding how Decision Makers Interpret Historical Data. (Presentation) 2013 Joint Statistical Meetings, Montreal, Aug. 3-8, 2013.

Other Presentations (supervised student names are in bold; presenter underlined)

1. Van Horn, C., Fouts, J., Fai, T., **Giang, W.C.W.** (2025). Evaluation of the Design of Resumes on Reviewer's

Reading Behaviors and Perceptions of Resume Content. *Poster presented at the Spring 2025 University of Florida, Industrial and Systems Engineering Poster Session, Gainesville FL.*

2. Burns, L.^U, Bisht, R.^U, **Giang, W.C.W.** (2025). ChatGPT in Higher Education: Learning its Limits or Limiting Learning?. *Poster presented at the Spring 2025 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
3. **Dodd, J.**^U, **Giang, W.C.W.** (2024). Examining Ecological Validity of Video-based Simulated Driving for Evaluating Automated Vehicle Interfaces. *Poster presented at the Spring 2024 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
4. **Whelden, N.**^U, **Saraf, R.**^U, **Munsie, S.**^U, **Giang, W.C.W.** (2024). “Can ChatGPT do my Homework?”: Human Factors Methods to Improve Student use of ChatGPT. *Poster presented at the Spring 2024 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
5. **Arranz, J.**^U, **Giang, W.C.W.** (2023). Computer Vision based Lane Detection System using Sobel Edge Detection for a Safety Research Project. *Poster presented at the Spring 2023 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
6. **Scholtz, J.**^U, **Mera-Sarnelli, A.**^U, **Fischer, K.**^U, **Giang, W.C.W.** (2023). Creation of a ChatGPT Experience Survey for University of Florida Students. *Poster presented at the Spring 2023 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
7. **Fasulo, S.**^U, **Gabriely, A.**^U, **Wilson, F.**^U, Classen, S., **Giang, W.C.W.** (2022). Can ADAS Systems Help Drivers with Parkinson’s?. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
8. **Alderman, S.**^U, **Zheng, H.**^G, **Giang, W.C.W.** (2022). ACC and the Effect of Automation on Driving Performance. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
9. **Campbell, I.**^U, **Zheng, H.**^G, **Giang, W.C.W.** (2022). Do Older and Younger Drivers Differ in How They Read Training Material for an Adaptive Cruise Control System?. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
10. **Carames, K.**^U, **Eskandar, M.**^G, **Giang, W.C.W.** (2022). Remote Participatory Design and Shared Decision Making for Older Adults with Mild Cognitive Impairment and Automated Vehicles. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
11. **Campbell, I.**^U, **Zheng, H.**^G, **Giang, W.C.W.** (2022). Do Older and Younger Drivers Differ in How They Read Training Material for an Adaptive Cruise Control System?. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
12. **Kibler, K.**^U, **Zheng, H.**^G, **Giang, W.C.W.** (2022). Training and Age Effects on Visual Attention during Partially Automated Driving. *Poster presented at the Spring 2022 University of Florida, Undergraduate Research Symposium, Gainesville FL.*
13. **Kibler, K.**, **Shaw, L.**, **Alderman, S.**, **Rudd, N.**, **Giang, W.C.W.** (2021). An analysis of ADAS features within vehicle user models by market segment. (Presentation) University of Florida Undergraduate Research Symposium Spring 2021. Mar. 2021.
14. **Wei, J.**, **Giang, W.C.W.**, **Jeghers, M.**, **Rogers, J.**, **Li, Y.**, **Ramirez-Zamora, A.**, **Winter, S.M.**, **Classen, S.** (2021). Feasibility study to assess procedure and outcomes for drivers using autonomous in-vehicle technologies. (Presentation) Occupational Therapy Summit of Scholars 2021. June. 2021.
15. **Carames, K.**, **Mui, K.**, **Azad, A.**, **Rudd, N.**, **Giang, W.C.W.** (2020) Autonomous Vacuums and Understanding Human-Robot Team Relationships. (Presentation) University of Florida Undergraduate Research Symposium Fall 2020. Nov. 2020.
16. **Rudd, N.**, **Giang, W.C.W.** (2020) Improving Advanced Driving Assistance System Training to Help Users Adopt Safe-Usage Strategies. (Presentation) University of Florida Undergraduate Research Symposium Fall 2020. Nov. 2020.

17. **Banaei, N.**, Giang, W.C.W. (2020) Examining the Types of Predictions People Make When Using Visualizations of Historical Data: Are Individuals Optimistic, Pessimistic, or Neutral? (Presentation) University of Florida Undergraduate Research Symposium Spring 2020. Mar. 2020.
18. **Bland, E.**, Colon Morales, C., Alvarado, M., Giang, W.C.W. (2020) Studying User Interactions with Health Insurance Decision Aids. (Presentation) University of Florida Undergraduate Research Symposium Spring 2020. Mar. 2020.
19. **Holguin, J., Chen, J., Ajello, A.**, Giang, W.C.W. (2020) Analyzing User Interaction Strategies with Health Insurance Decision Aids. (Presentation) University of Florida Undergraduate Research Symposium Spring 2020. Mar. 2020.
20. **Taylor, G.**, Giang, W.C.W. (2020) Setting and Evaluating Impacts of Motion Base Limits on the Fidelity of Driving Simulation Studies. (Presentation) University of Florida Undergraduate Research Symposium Spring 2020. Mar. 2020.
21. **Zheng, H.**, Giang, W.C.W. (2020). An Observational Study on the Number of Pedestrians who Engage with Smart Device Distractions in Three Different Types of Pedestrian Spaces. (Presentation) Human Factors and Applied Psychology Student Conference 2020, Orlando, FL, Jan. 2020.
22. **He, X.**, Giang, W.C.W., Donmez, B. (2017). Understanding the Influence of User's Personality When Using Various Visualizations to Make Estimations Based on Historical Data. (Presentation) Undergraduate Engineering Research Day – 2017 Conference, University of Toronto, Toronto, Ontario, Aug. 2017.
23. **Medinac, A.**, Giang, W.C.W., Donmez, B. (2016). Decision Making in Medical Transport Dispatch: Investigating the Effects of Team Member Locations. (Presentation) Undergraduate Engineering Research Day – 2016 Conference, University of Toronto, Toronto, Ontario, Aug. 2016.
24. **Zhang, S.**, Giang, W.C.W., Donmez, B. (2016). Classification of Drivers' Visual-Manual Behaviours while Engaging with Smartphone and Smartwatch Notifications. (Poster) Undergraduate Engineering Research Day – 2016 Conference, University of Toronto, Toronto, Ontario, Aug. 2016.
25. **Giang, W.C.W.**, Donmez, B., MacDonald, R.D. (2014). Interpreting Visualizations of Historical Variability. (Presentation) 15th Annual Human Factors Inter-University Workshop, Buffalo, New York, Nov. 2014. ***Won Best Speaker Award.***
26. **Kerimov, E.**, Giang, W.C.W., Donmez, B., (2013). Investigating the Impact of Weather on Interfacility Medical Transfers. (Presentation) Undergraduate Engineering Research Day – 2013 Conference, University of Toronto, Toronto, Ontario, Aug. 2013.
27. **Giang, W.C.W.**, Donmez, B., MacDonald, R.D. (2013). The Influence of Uncertainty Information about Continuous Data on Decision Making: A Proposed Study. (Presentation) 14th Annual Human Factors Inter-University Workshop, Waterloo, Ontario, Nov. 2013. ***Won Best Speaker Award.***
28. **Giang, W.C.W.**, Donmez, B., MacDonald, R.D. (2012). Supporting Evidence-Based Time-Critical Decisions. (Presentation) 13th Annual Human Factors Inter-University Workshop. Toronto, Ontario, Nov. 2012.
29. **Giang, W.**, Burns C.M. (2011). Temporal Rate Synchrony Perception in Unimodal and Multimodal Interfaces. (Presentation) 12th Annual Human Factors Inter-University Workshop. Buffalo, New York, Nov. 2011.
30. **Giang, W.**, Burns C.M. (2010). Use of Temporal Synchrony as a Method for Showing Crossmodal Data Relationships. (Presentation) 11th Annual Human Factors Inter-University Workshop. Waterloo, Ontario, Canada, Nov. 2010.
31. **Giang, W.**, Sathananthan, G., Lamb, M., Keillor, J (2007). Assisted Target Detection: Does Cue Brightness Matter? (Presentation) 8th Annual Human Factors Inter-University Workshop. Waterloo, Ontario, Canada, Nov. 2007.
32. **Momtahan, K.**, Burns, C., Sherrard, H., Labinaz, M., Mesana, T., Enomoto, Y., Ho, V., Caves, W., Giang, W., Pajek, D., Saunders, C. (2006). The CARDIO Project (Cardiac Algorithms Research and Development in Operation). (Poster) Ontario Ministry of Health and Long-Term Care Celebrating Innovations in Health Care Expo, Toronto, April 19-20.

33. Momtahan, K., Burns, C., Sherrard, H., Labinaz, M., Mesana, T., Enomoto, Y., Ho, V., Caves, W., Giang, W., Pajek, D., Saunders, C. (2005). Decision Support Tools for Nurse Practitioners. (Poster) Ontario Nurse Practitioners Conference, Toronto, November 11-12.

TEACHING AND MENTORSHIP

Course Instruction

Year	University	Level	Course No.	Course Title	Enrollment
2025	University of Toronto	Grad	MIE1402	Experimental Methods in Human Factors Research	9
2025	University of Toronto	Undergrad	MIE242	Foundations of Cognitive Psychology	114
2023	University of Florida	Undergrad	EIN 3215C	Data Analytics for Industrial Applications (Probability and Statistics)	69
2022-2025	University of Florida	Undergrad /Grad	EIN 4245/6905	Human Factors Applications*	7+4; 27+1; 33; 48
2020/2021	University of Florida	Grad	EIN 6918	ISE Graduate Seminar	17; 17
2019-2024	University of Florida	Grad	EIN 5249	Human Factors in Systems Design*	9; 13+1; 6; 9; 18; 17
2019/2020	University of Florida	Undergrad	EIN 4360C	Facilities Planning and Work Design	49; 48
2014/2015	University of Toronto	Grad	KMD 1001	Knowledge Media Design: Fundamental Concepts	25; 30

* developed courses

Supervised Graduate Students (as primary supervisor)

Dates	Degree	Candidate	Thesis Title / Status
2021-Present	PhD	Albraa Rajkhan	Understanding the Role of the Learner in Human-Vehicle Automation Training (Passed qualifying exam – 2022, Passed Proposal Defense – 2025, Expected Dissertation Defence: 2026)
2020-2025	PhD	Haolan Zheng	Evaluation of Novel Methods for Training Drivers to Use Advanced Driver Assistance Systems (Graduated: 2025)
2019-2024	PhD	Mahtab Eskandar	Designing Autoamted Driving Systems for People with Cognitive Impairment (Graduated: 2024)
2018-2020	MS	Haolan Zheng	Distracted walking due to smartdevices – Effects of cognitive and physical distraction workloads on visual attention and gait.

Supervised Graduate Students (committee member)

Dates	Degree	Candidate	Thesis Title / Status
2020-2024	PhD	Mustafa Yerebakan	Human Factors of Human-Robot Collaborative Pollination (Advisor: Hu)
2020-2024	PhD	Armisha Robert	Can You Hear Me Now? Good: Using Sonic Cues to Detect Change in a Real-World 3D Audio Context (Advisor: McMullen)
2022-2023	PhD	Coralys Colon Morales	Data Analytics and Stochastic Models for Informed Decision Making in Healthcare (Advisor: Alvarado)
2022-2023	PhD	Shuai Hao	Research on Learning Effect of Vibrotactile Localization Based on Bayesian Brain Framework (Advisor: Hu)
2022-2023	PhD	Yue Luo	Residential Environmental Interventions and Biomechanics Outcomes Among Community-Dwelling Older Adults (Advisor: Hu)
2022-2023	PhD	Yuhao Chen	A Framework for implementing Industrial Human-Robot Collaboration: Applying Human Factors to Industrial Robot Integrations (Advisor: Hu)
2018-2020	MS	Mustafa Yerebakan	Biomechanical analysis of the effect different postures and surfaces have on writing (Advisor: Hu)

Supervised Undergraduate Thesis/Capstone Students

Dates	Role	Name(s)	Project
2025	Senior Design Project Supervisor	Stephen Chang, Sarina Phipps, Marialis Diaz, Fernandez, Madeline Eller, Amber Sapitula	Clinical Practice Guideline Compliance in Shands Neonatal Intensive Care Unit
2024	Senior Design Project Supervisor	Kylee Bobb, Jack Chillemi, Ella Gerdes, Ryan Gilbert, Kaylie Herring	Enhancing Clinical Admissions Workflow in Shands Neonatal Intensive Care Unit
2024	Senior Design Project Supervisor	Jackson Tyndall, Liel, Shamash, Sebastian Tanaka, Halle, Racenstein, Henry Van Boskirk	Rounding Optimization for Shands Neonatal Intensive Care Unit
2023	Senior Design Project Supervisor	Alex Jacobson, Kori Keesling, Marl Capili, Luca Giorgi, Jillian Gordy	Process Improvement for Patient Rounding in the Neonatal ICU at UF Health Shands
2023	Senior Design Project Supervisor	Sara Haase, Milan Mistry, Samantha Silva, Jorge Moros, Ethan Taylor, Cristina LaGrange	Standing Contracts Decision Tool for the Florida Department of Management Services (Prototype development)
2022	Senior Design Project Supervisor	Beatriz Castaneda, Margarita Castaneda, Alexandra Hinding, Katherine Hughes, Witchell Lafortune, Zachary Levine	Employee Benefits Calculator for the Florida Department of Management Services (Prototype development)

Dates	Role	Name(s)	Project
2021	Senior Design Project Supervisor	Jake Olsen, Nina Alfonzo, Luis Rivas, Aidan Muruve, Simon Salazar	Accessible automated vehicles for those with mild-cognitive impairments (Prototype development)
2021	Senior Design Project Supervisor	Perry Bechtle, Isiah Shechtman, James Sturgill, Nathaniel Vera	Accessible automated vehicles for those with mild-cognitive impairments (Scenario refinement and initial prototyping)
2021	Thesis Committee Member	Lauren Moore	Healthcare Cost Transparency Tools (Advisor: Alvarado)
2021	Senior Design Project Supervisor	Daniel Woodruff, Sabina Penuela, Lina Munoz, Ryan Scolforo, Parker McHenry	Accessible automated vehicles for those with mild-cognitive impairments (Scoping review and scenario development)
2020	Senior Design Project Supervisor	Samantha Fining, Danielle Jackson, Dillon Ortiz, Johnny Powell, Abby Preiser	Clinical Supplies for UF Health Shands Hospital
2020	Senior Design Project Supervisor	Bri Buzard, Erin Dempsey, Nicolette Somers, Lily Norenberg, Alisa Pompa, Maria Rinehart	Health Care Training for Urine Collection at UF Health Shands Medical Labs
2020	Thesis Committee Member	Alexa Carrie	How risk-taking behavior and decision factors influence health insurance selection (Advisor: Alvarado)
2019	Senior Design Project Supervisor	Lauren Adams, Victoria Arevalo, Molly Berk, Anthony Bradley, Trey LaNasa	Unfractionated Heparin Draws Process Analysis for UF Health Shands Hospital
2019	Senior Design Project Supervisor	Britney Doll, Anjali Kapur, Anita Kapur, Kelly Malloy, Thomas Hartland, Daniel Lacouture	Training Materials for UF Health Shands Hospital Point of Care Department
2019	Thesis Committee Member	Gabriela Buraglia	Girls who code confidently and effectively – A study of student engagement and learning in an after-school coding club. (Advisor: Gardner)
2018	Senior Project Supervisor	William Jackson Benfer	One Way Out Employee Shift Scheduler
2016	Co-supervised as a graduate student	Lavinia Hui	Dispatch Decision Making in an Air Medical Transport System (Advisor: Donmez)
2015	Co-supervised as a graduate student	Alex Zhou	Hazard Perception: A comparison between drivers engaging with smartphone and smartwatch notifications (Advisor: Donmez)

Supervised Undergraduate Research Students

Dates	Name	Notes
2023-2025	Caroline Ames	
2023-2024	Neeraja Poonjola	
2023-2024	Theresa Le	
2023-2024	Satsuki Mercado	
2023-2024	John Dodd	UF University Scholars Program Recipient
2022-2023	Marie Harriot	
2022-2023	Javier Arranz	UF University Scholars Program Recipient
2021-2022	Kaiana Kibler	UF Course-based Undergraduate Research Experience Student
2021-2022	Sarah Alderman	UF Course-based Undergraduate Research Experience Student
2020-2022	Isabella Campbell	UF Fernandez Family Scholar Recipient
2020-2022	Kenan Carames	UF University Scholars Program Recipient
2021-2021	Taryn Williamson	
2021-2021	Lauren Shaw	UF Course-based Undergraduate Research Experience Student
2020-2021	Jeffrey Chen	UF Emerging Scholars Program Recipient/ UF Course-based Undergraduate Research Experience Student
2020-2021	Sneha Alluru	
2019-2021	Nina Rudd	UF University Scholars Program Recipient
2020	Johnny Holguin	UF Course-based Undergraduate Research Experience Student
2020	Alexa Ajello	UF Course-based Undergraduate Research Experience Student
2020	Kinting Mui	
2020	Riley Marshall	
2019-2020	Emma Bland	UF University Scholars Program Recipient
2019-2020	Nika Banaei	
2019	Mariangely Gonzalez Vargas	Summer Undergraduate Research at UF (SURF) Program Participant
2019	Julia Davis	
2018	Juan Andere	

Guest Lectures, Panels, and Invited Talks

1. **Giang, W.C.W.*** (2024). Inclusive automated vehicles through human factors engineering. (Invited Talk) Presentation to FDOT/I-STREET Industry Showcase Day. Nov. 19, 2024.
2. **Giang, W.C.W.*** (2024). Human Factors and Human Systems Engineering (Guest Lecture) EIN 2002 – Introduction to Systems Engineering. April 11, 2024.
3. **Giang, W.C.W.*** (2023). Transportation Human Factors Research. (Invited Talk) Presentation to UF Transportation Institute. October 26, 2023.
4. **Giang, W.C.W.,** (2022). Human Factors in Healthcare (Guest Lecture) EIN 5501 – Health Systems Engineering

5. **Giang, W.C.W.**, (2021). Inclusive Automated Vehicles through Human Factors Engineering. (Presentation) Presentation to JM Family Enterprises and UFTI. October 21, 2021.
6. **Giang, W.C.W.**, (2021) UFTI Human Factors Group Overview. (Presentation) Presentation to UFTI External Advisory Board. October 19, 2021
7. **Giang, W.C.W.** (2020). Human Factors in Healthcare (Guest Lecture). EIN 4906/6905 – Models and Methods in Health Systems Engineering, University of Florida, Nov. 2020.
8. **Giang, W.C.W.** (2020). New and Emerging Technologies as Distractions (Invited Speaker). Florida Teen Safe Driving Coalition, Aug. 2020.
9. **Giang, W.C.W.** (2020). Our Community, Our Health National Town Hall on Distracted Driving (Invited Speaker). UF Healthstreet, Feb. 2020.
10. **Giang, W.C.W.** (2019). Human Factors in Healthcare (Guest Lecture). EIN 4906/6905 – Models and Methods in Health Systems Engineering, University of Florida, Nov. 2019.
11. **Giang, W.C.W.** (2019). An Introduction to Human Factors in Healthcare (Guest Speaker). UF SHS, University of Florida, Nov. 2018.
12. **Giang, W.C.W.** (2018). Industrial and Systems Engineering Research Panel (Guest Panel Speaker). UF IISE, University of Florida, Nov. 2018.
13. **Giang, W.C.W.** (2018). Using Human Factors to Improve Technology Use in Safety-Critical Systems (Guest Speaker). UF INFORMS, University of Florida, Nov. 2018.
14. **Giang, W.C.W.** (2018). Human Factors in Healthcare (Guest Lecture). EIN 4906/6905 – Models and Methods in Health Systems Engineering, University of Florida, Nov. 2018.
15. **Giang, W.C.W.** (2018). Understanding User Interactions with Emerging Technologies: Medical Dispatch and Driving (Invited Talk). Human Factors Interest Group, University of Toronto, Sept. 2018.
16. **Giang, W.C.W.** (2016). Random Variables (Guest Lecture). STA 286 – Probability and Statistics, University of Toronto, Jan. 2016.
17. **Giang, W.C.W.** (2015). Grad School Symposium (Invited Talk). Galbraith Society, University of Toronto, Oct. 2015.
18. **Giang, W.C.W.** (2015). Discrete Probability Distributions (Guest Lecture). STA 286 – Probability and Statistics, University of Toronto, Feb. 2015.
19. **Giang, W.C.W.** (2015). Task Analysis (Guest Lecture). MIE 240 – Human Centred Systems Design, University of Toronto, Jan. 2015.
20. **Giang, W.C.W.** (2014). Conquering Research Writing: The Article (Invited Talk). Galbraith Society, University of Toronto, Oct. 2014.
21. **Giang, W.C.W.** (2012). Supporting Evidence-Based Decisions in Urgent and Emergent Inter-Facility Medical Transportation (Guest Lecture). MIE 345 – Case Studies in Ergonomics, University of Toronto, Nov. 2012.
22. **Giang, W.** (2010). Multimodal Interfaces. (Guest Lecture). SYDE 543 – Cognitive Ergonomics, University of Waterloo, Nov. 2010.
23. **Giang, W.** (2009). Multimodal Interfaces. (Guest Lecture). SYDE 543 – Cognitive Ergonomics, University of Waterloo, Nov. 2009.

RESEARCH GRANTS

Dates	Funding Agency	Grantees	Title	Amount
10/2022 to 09/2024	National Institute of Standards and Technology (NIST)	Hu, B. (PI), Giang, W.C.W.	Integration of Robotics Codes and Standards into Occupational Safety Engineering Curriculum	\$99,991
01/2023 to 09/2023	UF Foundation	Kim, M. (PI), Giang, W.C.W.	RTPP: Interpretable Dynamic Eye-Tracking Analytics via Pattern Based Learning (IDEA-PBL)	\$10,000
01/2021 to 05/2022	Department of Transportation (DOT)	Kondyli, A. (PI), Depcik, C., Davidson, A., Koon, L., Motamedi, S., Jain, E., Zhao, X., Giang, W.C.W. , Hu, B., Akinwuntan, A., Devos, H., Bhattacharya, S.	Inclusive Design Challenge Semi-finalist: Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities	\$300,000
09/2020 to 08/2023	Administration for Community Living – National Institute on Disability, Independent Living, and Rehabilitation Research	Classen, S. (PI), Winter, S., Giang, W.C.W. , Rogers, J., Ramirez-Zamora, A.	Driving Performance of People with Parkinson’s Disease via Autonomous Vehicles	\$599,993
01/2020 to 06/2021	University of Florida – Clinical and Translational Science Institute	Mason, J. (PI), Giang, W.C.W. , Classen, S.	Exploring Younger and Older Drivers’ Trust, Attention, and Workload during Vehicle Automation	\$7,500
04/2019 to 06/2020	University of Florida – ISE Collaborative Research Seed Fund	Akcali, E. (PI), Giang, W.C.W. (Co-PI)	A Pilot Project for Incorporating Divergent Thinking Skills Development into a Project-based Course in Industrial and Systems Engineering: Educational Materials and Assessment Tools	\$10,000

SERVICE

Department Service

Dates	Position and/or Duties
2025-2025	Member, ISE Qualifying Exam Committee
2024-2025	Chair, ISE Marketing Committee
2024-2025	Member, Undergraduate Programs Committee

2024-2025	Member, UF Transportation Institute Director Search Committee
2024-2025	Member, Stochastic Systems Search Committee
2020-2024	Co-chair, Graduate Program Committee
2022-2023	ISE Qualifying Examination Coordinator
2021-2022	Member, Data Engineering Search Committee
2020-2021	Member, Masters Admissions Committee
2018-2020, 2021-2022	Member, PhD Admissions Committee
2019-2020	Member, Health and Human Systems Engineering Search Committee
2018-2020	Member, Graduate Program Committee
2018-2020	Coordinator, Human Factors Track General Exam
2018-2019	Member, Lecturer Search Committee
2018-2019	Member, Human Systems Engineering Search Committee

University Service

Dates	Position and/or Duties
2023-2025	Group Lead, Human Factors Group – University of Florida Transportation Institute
2021-2022	Interim Group Lead, Human Factors Group – University of Florida Transportation Institute
2018-2022	Member, Human Factors Group – University of Florida Transportation Institute

Professional Service

Dates	Position and/or Duties
2023-2024	Awards Committee – IEEE 4 th International Conference on Human Machine Systems
2022-2024	HFES Cognitive Engineering and Decision Making Technical group – Secretary Treasurer
2021-2024	HFES Alphonse Chapanis Best Student Paper Award Committee
2022	PhD Session Chair – IEEE 3 rd International Conference on Human Machine Systems
2021-2022	Associate Chair – IEEE International Conference on Systems, Man, and Cybernetics
2019-2023	Associate Chair – ACM Conference on Automotive UI
2018-2020, 2022	Committee Member, HFES – Webinar Committee
2017-2018	Publication Chair, 10 th International ACM Conference on Automotive UI (2018)
2013-2014	Committee Member, HFES – Social Networking and Operations Committee

Reviews

Journals: Human Factors, Ergonomics in Design, IEEE Transactions on Human Machine Systems, Information, Journal for Cognitive Engineering and Decision Making, SN Applied Sciences, Transportation Research Part F, IEEE Transactions on Intelligent Transportation Systems, Accident Analysis and Prevention, Journal of Medical Internet Research, Frontiers in Neuroscience/Psychology, Digital Health, Safety Science, IISE Transaction on Healthcare Systems Engineering

Conference Papers: Automotive UI, CHI, HFES, IEEE VR, HFES Healthcare, IEEE SMC Conference