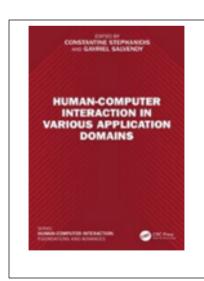
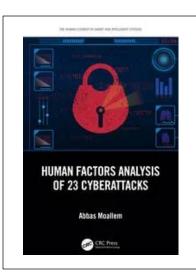
ISE FACULTY / *STUDENT PUBLICATIONS

SPRING 2024 - SPRING 2025

REFEREED JOURNALS / BOOKS







Computers in Industrial Engineering

Dessouky, Y, Editor-in-Chief, Elsevier.

Proceedings of the 7th International Conference on Management Science and Industrial Engineering

Dessouky, Y., Editor

Dashboard Design

Moallem, A., Chapter in "Human-Computer Interaction in Various Application Domains", CRC Press, 1st Ed., eBook <u>ISBN 9781003490692</u>, 2024.

Proceedings of 6th International Conference, HCI-CPT 2024, HCI for Cybersecurity, Privacy and Trust.

Moallem, A, 6th International Conference, HCI-CPT 2024, Held as Part of the 26th HCI International Conference, HCII 2024, Washington, DC, USA, June 29 – July 4, 2024, Proceedings, Part I, https://link.springer.com/book/10.1007/978-3-031-61379-1.

AHFE International

Moallem, A Proceedings of the 15th International Conference on Applied Human Factors and Ergonomics and the Affiliated Conferences Nice, France, Volume 127, ISBN: 978-1-964867-03-8, July, 2024

Human Factors Analysis of 23 Cyberattacks

Moallem, A, CRC Press, Boca Raton, FL., 2025. ISBN: 978-1-032-60862.

The Customer's Preparedness and Product Quality - Impacts on Customer Satisfaction
Freund, L., Talbi, A., Kwan, S. (2024).. In: Leitner et.al. (eds) The Human Side of Service
Engineering. AHFE (2024) International Conference. AHFE Open Access, vol 143. AHFE
International, USA. http://doi.org/10.54941/ahfe1005091

T-shaped Professionals: The Past, Present, and Future of MyT-Me Development.

Freund, L., Spohrer, J., Savva, P., Gandhi, Y. (2024). In: Leitner et.al. (eds) The Human Side of Service Engineering. AHFE (2024) International Conference. AHFE Open Access, vol 143. AHFE International, USA. http://doi.org/10.54941/ahfe1005078

Exploring the impact of lighting sources on walking behavior in obstructed walkways among older adults.

Luo, Y., Chen, Y., **Huang, G.**, & Hu, B. (2024). Experimental Gerontology, 196, 112580. https://doi.org/10.1016/j.exger.2024.112580

Exploring the effect of human-drone communication modality on safety and balance control in virtual construction environments.

Hu, B., Xia, S., Zhu, Z., Cheng, J. Y., **Luo, Y.**, Jeelani, I., & Gheisari, M. (2024). *Ergonomics*, 1-14. https://doi.org/10.1080/00140139.2024.2380342

Integrating Motion Intention and Impedance Control in Teleoperated Robotic Rehabilitation for Upper Extremity Disorders.

Banzon, A. J., Wang, E., **Luo, Y.**, Jin, L., & Jiang, L. (2024). *Journal of Engineering and Science in Medical Diagnostics and Therapy*, 1-11. https://doi.org/10.1115/1.4067182

*P. K. Parameshwara and **S. Gupta**,2024 IEEE 15th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON), Yorktown Heights, NY, USA, 2024, pp. 612-619, doi: 10.1109/UEMCON62879.2024.10754733.

From young to old: The effects of information presentation type, multimodal display, and age on situation awareness and processing time in automated vehicles

Martinez, K. D., & **Huang, G**. (2024). Transportation Research Part F: Traffic Psychology and Behaviour, 103, 128-140. https://doi.org/10.1016/j.trf.2024.04.002

Characterizing the effect of mind wandering on partially autonomous braking dynamics
Sridhar, H., Huang, G., Thorpe, A., Oishi, M., & Pitts, B. J. (2024).. ACM Transactions on
Cyber-Physical Systems. https://doi.org/10.1145/3653678

ISE FACULTY

CONFERENCE PRESENTATIONS / PROCEEDINGS

• Dr. Yasser Dessouky

Overview of Supply Chain Analytics, The Sixth IEEE International Conference on Technology Management, Operations and Decisions, Sharjah, UAE, 2024.

Applying Statistical and Machine Learning Techniques to Health Problems, 2024

International Conference on Management Science and Industrial Engineering, Bangkok, Thailand, 2024.

• Dr. Gaojian Huang

- Multimodal Feedback for Effective Takeover in Automated Vehicles for Hearing Impairment Chu, A., Lo, W. H., & Huang, G. (2024). In Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (pp. 304-306). https://doi.org/10.1145/3641308.3680515 *Best Video Award
- Comparing Static and Dynamic Vibration Cues in Wristband Haptic Feedback for
 Enhanced Driver Response in Automated Vehicles Lo, W. H., & Huang, G. (2024)..
 In Proceedings of the Human Factors and Ergonomics Society Annual Meeting.
 Sage CA: Los Angeles, CA: SAGE Publications.
 https://doi.org/10.1177/1071181324126875
- Assessing Meaningful Visual and Tactile Feedback for Effective Automated Vehicle
 Takeover by Hearing and Non- Hearing Drivers Chu, A., Lo. W. H., & Huang, G.
 (2024).. In Proceedings of the Human Factors and Ergonomics Society Annual
 Meeting. Sage CA: Los Angeles, CA: SAGE Publications.
 https://doi.org/10.1177/10711813241268844
- A Survey on Perceptions of Smartwatch Haptic Feedback for Enhancing Automated Vehicle Takeover Decisions Lo, W. H., & Huang, G. (2024). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. SAGE Publications. https://doi.org/10.1177/10711813241275929
- The Impact of Meaningful Vibrotactile Displays on User Preferences Across Age Groups in Automated Driving Zhang, Z., Lo, W. H., & Huang, G. (2024). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/10711813241275919
- Exploring Attitudes Towards Smart Home Technology Through Focus Groups:

 Comparing Older Adults With and Without Health Conditions. Jain, P., Pendyala, S., Etu, E. E., Zhang, Z., Shah, M., Larot, J., & Huang, G. (2024). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/10711813241276479 *2024 Arnold M. Small Best Student Paper Award
- The Intersection of Voice Assistants and Autonomous Vehicles: A Scoping Review Chu, A., & Huang, G. (2024). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/10711813241275908
- Haptic Technology for Hearing Loss: A Systematic Review of Technical Feasibility,
 Usability, and User Experience Orzech, G., Luo, Y., & Huang, G. (2024). In
 Proceedings of the Human Factors and Ergonomics Society Annual Meeting. Sage
 CA: Los Angeles, CA: SAGE Publications.
 https://doi.org/10.1177/10711813241275928

A Systematic Review Toward a Comprehensive Framework for Measuring Nonchronological Age Milind, N., Jain, P., & Huang, G. (2024). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/10711813241268864

• Dr. Minnie Patel

Enhancing Product Designing with the Help of Artificial Intelligence
Nikalwala, D. and Patel, M.H., Proceedings of PICMET 2024, Portland, OR
Impact of AI in Product Lifecycle

Tiwari, A. and Patel M. H., Proceedings of PICMET 2024, Portland, OR

• Dr. Yue (Lyla) Luo

Exploring the Application of Upper Limb Exoskeletons in Pediatric Rehabilitation: A Literature Review.

Meda, P., Jiang, L., & **Luo, Y.**, In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting (p. 10711813241262266)*. Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/10711813241262266, 2024.

Assessing Human Visual Attention in Retail Human-Robot Interaction: A YOLOv8-Nano and Eye-Tracking Approach,

Kumar, K., Chen, Y., Hu, B., & **Luo, Y.** (2024). In Adjunct Proceedings of the 32nd ACM Conference on User Modeling, Adaptation and Personalization (pp. 610-615). https://doi.org/10.1145/3631700.3665195, 2024.

Designing Nightlights to Facilitate Evening Activities among Older Adults: Illuminance and Hue Preferences.

Luo, Y., Chen, Y., Yim, S., & Hu, B. (2024). In 2024 IEEE 4th International Conference on Human-Machine Systems (ICHMS) (pp. 1-5).

IEEE. https://doi.org/10.1109/ICHMS59971.2024.10555655,2024.

Haptic Technology for Hearing Loss: A Systematic Review of Technical Feasibility, Usability, and User Experience.

Orzech, G., **Luo, Y.,** & Huang, G. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting (p. 10711813241275928).* Sage CA: Los Angeles, CA: SAGE Publications.

https://doi.org/10.1177/10711813241275928,2024.

• Dr. Louis Freund

T-Shaped Professionals: The Past, Present, and Future of MyT-Me Development

Louis E. Freund, Jim Spohrer, Pavel Savva, Yash Gandhi; presented at The Human Side of Service Engineering (HSSE), a subconference of AHFE International, Nice, FR, July 2024.

The Customer's Preparedness and Product Quality: Impact on customer satisfaction

Louis E. Freund, Stephen Kwan, Assil Talbi (Univ of Trento), presented at The Human Side of Service Engineering (HSSE), a subconference of AHFE International, Nice, FR, July 2024.

• Dr. Shilpa Gupta

Authentic Assessment and Student Wellbeing

CSU Symposium on Wellbeing Informed Teaching, 2024.

• Dr. Abbas Moallem

Fundamentals in Data Visualization

AHFE 2024 International Conference – Nice, France, Tutorials Program

The 10 Things you need to know to protect yourself and your company from cyber attacks

AHFE 2023 International Conference – Nice, France, A Tutorials Program

How to Design User-Friendly Dashboards

Tutorials Program, HCI INTERNATIONAL 2024 Conference on Human-Computer Interaction

Externally Funded Grants and Contracts Awarded 2024

• Dr. Anil Kumar

Wellbeing and Trust in Automated Mobility
Honda Research Institute – \$35,003
Pilot Workload Assessment in EVTOL Operations
Honda Research Institute – \$41,351

Dr. Yue Luo and Dr. Behin Elahi

Demonstrating Mixed Reality and Edge Computing in Human-Robot Interaction and Collaboration Considering Human Factors

National Science Foundation (NSF). CISE MSI: RDP: IIS: HCC: (Co-PI; \$599,969). 2025-2028. PI/Co-PIs: Lin Jiang (PI), Lesther Papa (Co-PI), Yue Luo (Co-PI), BEHIN ELAHI (Co-PI), Mahima Agumbe Suresh (Co-PI)

• Dr. Gaojian Huang

Promoting quality of life and independence of Latinx older adults through co-design of an augmented reality and tactile-based self-driving car interface.

National Institutes of Health. (Sole PI; \$50,000). 2024-2025.

Internally Funded Project Awards and Other Faculty Activities 2024

Dr. Yue Luo

- Harmonizing Human-Robot Communication in Manufacturing Collaborations,
 SJSU VPRI Teaming Award. (PI; \$24,960). 2024-2025.
- Enhancing Road Safety by Addressing Hazards from Rental Vehicles, Mineta Transportation Institute Emerging Leaders Seed Grant – U.S. Department of Transportation. (PI; \$6,736). 2024.
- Enhancing Automated Vehicle Takeover: Integrating Age, Mental State, and Assistive Technologies, SJSU College of Engineering Small Group Project. (Co-PI; \$50,000). 2024-2025.

Dr. Gaojian Huang

- Enhancing Automated Vehicle Takeover: Integrating Age, Mental State, and Assistive Technologies
 - SJSU College of Engineering Small Group Project (PI; \$100,000). 2024 2025.
- AI-Driven Adaptive Multimodal Interfaces for Enhancing Micro-Mobility Safety
 SJSU Vice President for Research & Innovation (VPRI) Teaming Award. (PI; \$25,000).
 2025 2026.

Invited Talks

Dr. Yasser Dessouky

- o APIEMS 2024, Chiang Mai University, 2024
- o NYU-Abu Dubai, 2024
- New South Wales University, Kensington, AUS 2024

Dr. Gaojian Huang

Innovative Teaching Methodologies in Human-centric Industrial Engineering and Management Education Huang, G. (2025).. Invited Panelist, 2nd ERASMUS+ LEONARDO (Learning & Experimentation Open-Access Factory for Industrial Workforce 5.0) Live Discussion Panel. January.

Balancing Multimodal and Unimodal Takeover Requests: Leveraging Sensory Channels in Automated Vehicle Interfaces Huang, G. (2024).. Human Factors and Safety Group. University of Leeds. November.

Use of Sensory Channels in Automated Vehicles: Implications for Adaptive Human-Machine Interfaces Huang, G. (2024). Strategic. HFES Student Chapter. University of Illinois Urbana-Champaign. November.

Optimizing Human-Machine Interfaces: Balancing Sensory Modalities in Automated Vehicle Takeover Requests Huang, G. (2024).. HFES Student Chapter. Virginia Tech. October.

•

E-Scooters and Subjective Well-Being: The Roles of Skill Level and Automation? Workshop on "promoting well-being for mobility users in future hybrid societies Huang, G. (2024)." at the 16th International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications. September.

Mr. Dan Rosenberg

Designing in the Age of Al. Invited lecture in the HumanTech educational event series sponsored by SWPS University, Warsaw Poland. 2024. This was a virtual event that SWPS hosts quarterly.

Other Professional Activity

Dr. Yasser Dessouky

- o Technical Committee Chair, 7th International Conference on Management Science and Industrial Engineering, 2025, Bali, Indonesia.
- Conference co-Chair, 51st Conference of Computers and Industrial Engineering 2024, Sydney, AUS.
- o Technical Committee Chair, 2024 6th International Conference on Management Science and Industrial Engineering, 2024, Bangkok, Thailand.
- Advisory Board of UNIDEMI, NOVA University, Lisbon, Portugal 2024

• Mr. Dan Rosenberg - Invited panels participation:

- Frascara, J., Gardien, P., Noël, G., Rosenberg, D., Stappers, P.J., and Wild, D.
 (2024) Towards strengthening Methods in Design Education and Practice, Webinar hosted by Lucern University of Applied Sciences and Arts, Dec. 9, 2024.
- Rosenberg, D., Welchman, L., Bowles, C. (2024) Day 1 Panel participant reflecting and recapping Designing with Al 2004, Rosenfeld Media conference, June 4, 2024.
- Maj, K, Sypniewski, D., Rosenberg, D., Rayss, A., Nowacka, A. (2024) Designing in the Age of Al. Invited panelist in the HumanTech educational event series sponsored by SWPS University, Warsaw Poland.

Dr. Yue Luo

- o Program Chair, Human Factors and Ergonomics Society Aging Technical Groups
- Section Chair, 68th Annual Meeting of the Human Factors and Ergonomics Society
- Program Committee, 2024 IEEE International Conference on Human-Machine
 Systems

Dr. Ramesh Srinivasan

 Collaboration with California Product Stewardship Council (CPSC) on Solar Panel Recovery Project