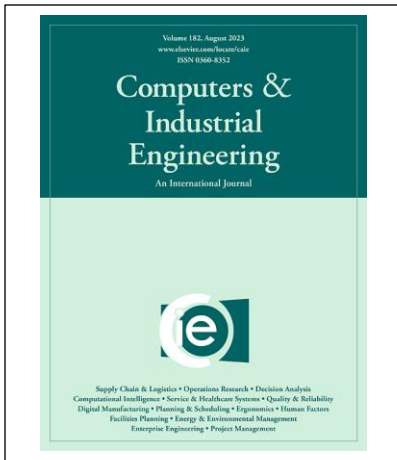


# ISE FACULTY / \*STUDENT PUBLICATIONS

## SPRING 2023 – SPRING 2024

### REFEREED JOURNALS / BOOKS



#### **Computers in Industrial Engineering**

**Dessouky, Y**, Editor-in-Chief, Elsevier. Cite score: 11.9. The Impact Factor of this journal is 7.9, CAIE Cite score puts it in the 97<sup>th</sup> percentile of 262 engineering journals.

**Prediction of State of Health of Lithium-Ion Battery Using Health Index Informed Attention Model**  
Wei, Yupeng, Sensors 23.5 (2023): 2587.

**Remaining useful life prediction of bearings with attention-awared graph convolutional network**  
Wei, Yupeng, and Dazhong Wu, Advanced Engineering Informatics 58 (2023): 102143.

**Data-Driven Online Prediction of Discharge Capacity and End-of-Discharge of Lithium-ion Battery**  
Shi, Junchuan, Yupeng Wei, and Dazhong Wu, Journal of Computing and Information Science in Engineering (2023): 1-14.

**Model-based real-time prediction of surface roughness in fused deposition modeling with graph convolutional network-based error correction**

Wei, Yupeng, and Dazhong Wu, Journal of Manufacturing Systems 71 (2023): 286-297.

**Conditional variational transformer for bearing remaining useful life prediction**

Wei, Yupeng, and Dazhong Wu, Advanced Engineering Informatics 59 (2024): 102247.

**Remaining useful life prediction using graph convolutional attention networks with temporal convolution-aware nested residual connections**

Wei, Yupeng, Dazhong Wu, and Janis Terpenny, Reliability Engineering & System Safety 242 (2024): 109776.

**State of health and remaining useful life prediction of lithium-ion batteries with conditional graph convolutional network**

Wei, Yupeng, and Dazhong Wu, Expert Systems with Applications 238 (2024): 122041.

**Sheet resistance prediction of laser induced graphitic carbon with transformer encoder-enabled contrastive learning**

Wei, Yupeng, Gerd Grau, and Dazhong Wu, Journal of Intelligent Manufacturing (2024)

**What Changes the Travel Pattern: A National Survey on the Impacts of the COVID-19 Pandemic on Older Adults' Public Transportation Usage**

Etu, E. E., Sureshbabu, K., Summerville, S., Parmar, A., & **Huang, G.** (2023).. *Journal of Transport & Health*. <https://doi.org/10.1016/j.jth.2023.101718>

**Drinking and Driving: A Systematic Review of the Impacts of Alcohol Consumption on Manual and Automated Driving Performance.**

Dong, M., Lee, Y., Cha, J., & **Huang, G.** (Accepted). *Journal of Safety Research*.

**Driving Aggressively or Conservatively? Investigating the Effects of Automated Vehicle Interaction Type and Road Event on Drivers' Trust and Preferred Driving Style.**

Lee, Y., Dong, M., Krishnamoorthy, V., Akash, K., Misu, T., Zheng, Z., & **Huang, G.** (2023). *Human Factors*. <https://doi.org/10.1177/00187208231181199>

**Smart Speech Systems: A Focus Group Study on Older Adult User and Non-User Perceptions of Speech Interfaces.** Werner, L., **Huang, G.**, & Pitts, B. J. (2023). *International Journal of Human-Computer Interaction*. <https://doi.org/10.1080/10447318.2022.2050541>

**The future of mobility-as-a-service: trust transfer across automated mobilities, from road to sidewalk,** Hunter, J.G., Ulwelling, E., Konishi, M., Michelini, N., Modali, A., Mendoza, A., Snyder, J., Mehrotra, S., Zheng, Z., **Kumar, A.R.** and Akash, K. (2023), *Frontiers in Psychology*, 14, p.1129583

**Ethics in the Age of Disruptive Technologies – An Operational Roadmap,** Flahaux, J. (2023), The Markkula Center for Applied Ethics, ITEC, and Santa Clara University, Santa Clara, CA 95053 <https://www.scu.edu/institute-for-technology-ethics-and-culture/itec-book-pdf/>

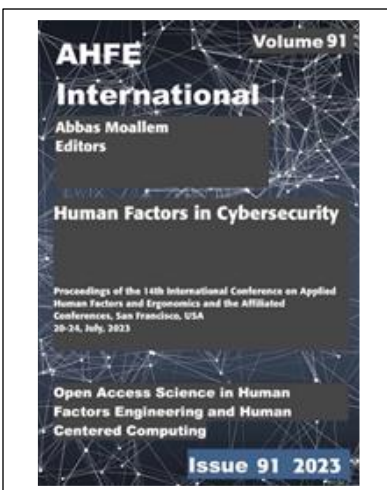
**Human Factors in Cybersecurity,** Editor: **Abbas Moallem**, Publication Date: 2023, ISBN: 978-1-958651-67-4, DOI: [10.54941/ahfe1003993](https://doi.org/10.54941/ahfe1003993)

**Proceedings of 5th International Conference, HCI-CPT 2023, HCI for Cybersecurity, Privacy and Trust.** Springer, Edited by **Abbas Moallem** <https://link.springer.com/book/10.1007/978-3-031-35822-4>

**Handbook: Human-Computer Interaction: Foundations, Advances, Methods, Technologies and Applications,** 6-Book Set, Taylor & Francis Chapter 14, Dashboard Design

**Very-Short-Term Solar Forecasting Considering Frequency Patterns,** H. Panamtaash\*, S. Mahdavi\*, Q. Z. Sun, G-J Qi, **H. Liu,** A. Dimitrovski, IEEE Open Access Journal of Power and Energy, vol. 10, pp. 517-527, 2023, DOI: [10.1109/OAJPE.2023.3294457](https://doi.org/10.1109/OAJPE.2023.3294457)

**Weakly Supervised Semantic Segmentation of Histological Tissue via Attention Accumulation and Pixel-level Contrast Learning,** Y. Han, L. Cheng, G. Huang, G. Zhong, J. Li, X. Yuan, & **H. Liu,** *Physics in Medicine & Biology*, Vol. 68, No. 4, Feb. 2023, DOI [10.1088/1361-6560/acacee](https://doi.org/10.1088/1361-6560/acacee)



# ISE FACULTY

## 2023 -24

### CONFERENCE PRESENTATIONS / PROCEEDINGS

- **Dr. Yasser Dessouky**

- ***Applying Statistical and Machine Learning Techniques to Health Problems***

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

- ***Future Supply Chain Analytics***

- *12th International Symposium on Intelligent Manufacturing and Service Systems, Sakraya, Turkey, May, 2023*

- ***Supply Chain Analytics***

- *2023 International Conference on Management Science and Industrial Engineering, Chaing Mai, Thailand, April, 2023.*

- **Dr. Gaojian Huang**

- ***Tactile Displays: The Effects of Location and Intensity on Automated Vehicle Takeover Performance***

- **Huang, G., & Pitts, B. J. (2023).**.. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/21695067231192212>

- ***Empowering Independence: A Scoping Review on Innovations in Smart Home Technology for People with Motor Disabilities***

- **Zhang, Z., Luo, Y., & Huang, G. (2023).**.. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/21695067231192266>

- ***Human-Centered Design: A Haptic Robotic-Based Leader-Follower Driving Training System to Improve Driving Skills and Enhance Safety***

- **Lammert, K., Huang, G., Etu, E. E., Quientero, D., & Jiang, L. (2023).** In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/21695067231192452>

- ***Exploring the Impacts of Mind Wandering on Driver Takeover in Automated Vehicles: A Comparative Study of Multimodal Displays***

- **Dong, M., Etu, E. E., Jiang, L., & Huang, G. (2023).**.. In *Adjunct Proceedings of the 15th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 93-98). <https://doi.org/10.1145/3581961.3609882>

- **Dr. Yue (Lyla) Luo**

- ***Empowering Independence: A Scoping Review on Innovations in Smart Home Technology for People with Motor Disabilities***

- **Zhang, Z., Luo, Y., & Huang, G. (2023, October).**.. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (p. 21695067231192266). Sage CA: Los Angeles, CA: SAGE Publications.

- **Dr. Anil Kumar**

- ***Trust in Shared Automated Vehicles: Study on Two Mobility Platforms***

- **Mehrotra, S., Hunter, JG, Konishi, M., Akash, K., Zheng, Z., Misu, T., Kumar, A., Reid, T., and Jain. N. (2023).** No. TRBAM-23-04456. Transportation Research Board 102nd Annual Meeting, Washington DC.

- **Dr. Behin Elahi**

- ***Investigating the Educational Impact of Augmented Reality (AR) and Virtual Reality (VR) Applications in Teaching Industrial and Systems Engineering Courses***

- Elahi, B., 2024 ASEE CIEC conference in Garden Grove, California.

- **Dr. Shilpa Gupta**

- ***Experience with Authentic Assessment in a Data Science Classroom***

- Gupta, S. (2023), Proceedings of Annual Hawaii University International Conferences on STEM/STEAM and Education, HI

- **Dr. Abbas Moallem**

- ***Fundamentals in Data Visualization and Dashboard Design***

- AHFE 2023 International Conference - San Francisco, CA Tutorials Program

- ***Human Factors and Cybersecurity,***

- AHFE 2023 International Conference - San Francisco, CA Tutorials Program

- ***How to Design User-Friendly Dashboards***

- Tutorials Program, HCI INTERNATIONAL 2023 Conference on Human-Computer Interaction, Copenhagen, Denmark

- ***Cybersecurity, Privacy, and Trust in Large Language Models (LLMs) and Artificial Intelligence Chatbots***

- Helmut Degen, Stavroula Ntoa, **Abbas Moallem**, Panel Program, HCI INTERNATIONAL 2023 Conference on Human-Computer Interaction, Copenhagen, Denmark

- **Dr. Hongrui Liu**

- ***Script2Graph: Auto-construct Screenplay Text World by Mining Contextual Information***

- D. Wang, L. Cheng, H.W. Liu, R. Li, H. Wang, **H. Liu\*\***

- Proceedings of 2023 IEEE 3rd International Conference on Software Engineering and Artificial Intelligence (SEAI), Xiaomen, China, June 2023. DOI: [10.1109/SEAI59139.2023.10217409](https://doi.org/10.1109/SEAI59139.2023.10217409)

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## Externally Funded Grants and Contracts Awarded

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- **Dr. Anil Kumar**
  - ***Respiratory Protection for Firefighters Responding to Wildland Fires***  
Kumar, AR (Co-PI)., \$1,980,000, Climate Action 2023 Seed Awards, State of California.  
Aug 2023 – Aug 2025.
  - ***Pro-social Satisfaction Measurement in Mobility***  
Kumar, AR (PI)., \$32,931, Sponsor-Honda Research Institute, 2023
- **Dr. Yue (Lyla) Luo**
  - ***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.
- **Dr. Gaojian Huang**
  - ***Enhancing Driver Engagement in Automated Vehicles for Safer Transitions***  
U.S. Department of Transportation. Mental States & Machine: (PI; \$100,000). 2023 – 2024.
  - ***Investigating Driver Safety Training in the Age of Autonomous Vehicles using Wearable Robots***  
American Honda Motor Company. (PI; \$25,000). 2023 – 2024.
  - ***Enhancing Road Safety by Addressing Hazards from Rental Vehicles***  
Mineta Transportation Institute Emerging Leaders Seed Grant – U.S. Department of Transportation. (Co-PI; \$6,736). 2023 – 2024.
- **Dr. Hongrui Liu**
  - ***Test/Research Market Clearing Systems for ISO New England***, 2023. Awarded \$25,000  
PI

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## Internally Funded Project Awards and Other Faculty Activities

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- **Dr. Anil Kumar**  
*The Effects of Hepatic Feedback on Spatial Awareness*  
ERFA grant, \$2625, 2023-2024

### Invited Talks

- **Dr. Yasser Dessouky**
  - Khalifa University, Abu Dhabi, 2024
  - NYU-Abu Dhabi, 2024
  - North South Wales University, Kensington, AUS 2024
  - American University of Sharjah, UAE, 2023
- **Dr. Gaojian Huang**  
*Universal Interface Design for Next-Generation Automated Vehicles: Multimodal Information Integration and Evaluation*  
IT Distinguished Colloquium Series. Kennesaw State University. November 2023  
*Next-generation Human-Machine Interface in Automated Vehicles for Universal Drivers*  
RSCA in Five: Faculty Short Talks. San Jose State University. April 2023.

### Other Professional Activity

- **Dr. Yasser Dessouky**
  - **Technical Committee Chair**, 6th International Conference on Management Science and Industrial Engineering, 2024, Bangkok, Thailand.
  - **Conference co-Chair**, 50<sup>th</sup> Conference of Computers and Industrial Engineering 2023, Sharjah, UAE.
  - **Technical Committee Member**, 2023 5th International Conference on Management Science and Industrial Engineering, 2023, Chiang Mai, Thailand.
- **Dr. Ramesh Srinivasan**
  - **Instructor & Coach on Environmental Impact Estimation, *The XCarb™ Accelerator Programme***, funded by **ArcelorMittal** (*largest steel producer in the world*) to support breakthrough technology start-ups which hold the potential to accelerate the decarbonisation of the steel industry. Nov 15, 2023 - Jan 15, 2024. <https://corporate.arcelormittal.com/climate-action/xcarb/xcarb-innovation-fund/xcarb-accelerator-programme>
- **Dr. Abbas Moallem**
  - **Conference Chair** HCI-CPT: 5th International Conference on HCI for Cybersecurity, Privacy, and TrustHeld as Part of the 25th HCI International Conference, HCII 2023, Copenhagen, Denmark, July 23–28, 2023.