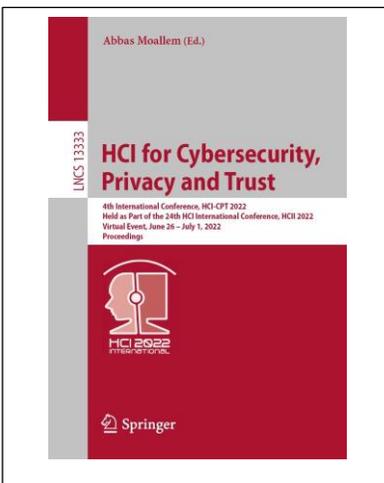
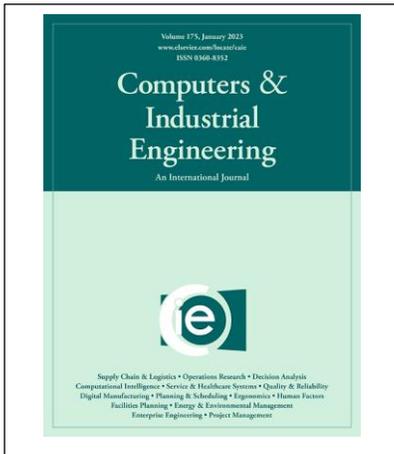


ISE FACULTY / *STUDENT PUBLICATIONS

SPRING 2022 – SPRING 2023

REFEREED JOURNALS / BOOKS



Computers in Industrial Engineering

Dessouky, Y, Editor-in-Chief, Elsevier. Cite score: 7.9.

The Impact Factor of this journal is 5.431, ranking it 21 out of 112 in *Computer Science, Interdisciplinary Applications*

HCI for Cybersecurity, Privacy, and Trust

Moallem, A (Editor), (2022), 4th International Conference, HCI-CPT 2022, [Available from Springer](#).

Bearing remaining useful life prediction using self-adaptive graph convolutional networks with self-attention mechanism

Wei, Y, Dazhong Wu, and Janis Terpeny. *Mechanical Systems and Signal Processing* 188 (2023): 110010

Prediction of state of health and remaining useful life of lithium-ion battery using graph convolutional network with dual attention mechanisms

Wei, Y, and Dazhong Wu. *Reliability Engineering & System Safety* 230 (2023): 108947. **(Impact factor: 7.247)**

Convolutional Long-Short Term Memory Network with Multi-Head Attention Mechanism for Traffic Flow Prediction

Wei, Y, and Hongrui Liu. *Sensors* 22.20 (2022): 7994.

Material removal rate prediction in chemical mechanical planarization with conditional probabilistic autoencoder and stacking ensemble learning

Wei, Y, and Dazhong Wu. *Journal of Intelligent Manufacturing* (2022): 1-13.

Constructing Robust and Reliable Health Indices and Improving the Accuracy of Remaining Useful Life Prediction

Wei, Y, Dazhong Wu, and Janis Terpeny. *Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems* 5.2 (2022): 021009.

To Inform or to Instruct? An Evaluation of Meaningful Vibrotactile Patterns to Support Automated Vehicle Takeover Performance

Huang, G., & Pitts, B. J. (2022). . *IEEE Transactions on Human-Machine Systems*. <https://doi.org/10.1109/THMS.2022.3205880>

In-Vehicle Human Machine Interface: Investigating the Effects of Tactile Displays on Information Presentation in Automated Vehicles

Martinez, K. D., & **Huang, G.** (2022). *IEEE*
Access. <https://doi.org/10.1109/ACCESS.2022.3205022>

Age is more than just a number: The relationship among age, non-chronological age factors, self-perceived driving abilities, and autonomous vehicle acceptance

Huang, G., Hung, Y. H., Proctor, R. W., & Pitts, B. J. (2022). *Accident Analysis and Prevention*. <https://doi.org/10.1016/j.aap.2022.106850>

Quaternion-valued Correlation Learning for Few-Shot Semantic Segmentation
Z. Zheng, G. Huang, X. Yuan, C.-M. Pun, **H. Liu**, & B. Ling (202), *IEEE Transactions on Circuits and Systems for Video Technology*, 2

Convolutional Long-Short Term Memory Network with Multi-Head Attention Mechanism for Traffic Flow Prediction

Y. Wei, **H. Liu** *Sensors* (2022), 22(20), 7994.

A Control Framework to Enable a Commercial Building HVAC System for Energy and Regulation Market Signal Tracking

W. Wang, G. Tian, Q. Z. Sun, **H. Liu**, (2022) *IEEE Transactions on Power Systems*

Application of Value Stream Mapping in E-Commerce: A Case Study on an Amazon Retailer

Y. Qin*, **H. Liu** (2022). *Sustainability*: 14(2):713.

ISE FACULTY 2022

CONFERENCE PRESENTATIONS / PROCEEDINGS

- **Dr. Anil Kumar**
How Do Different Cueing Strategies Affect Drivers' Perceived Workload?
Kumar, AR., Ho, Samson, Wu, X., & Misu, T. (2022).. *In The Proceedings of Human Factors and Ergonomics Society 63rd International Annual Meeting*, October 10 -14, 2022, Atlanta, GA. USA.
- **Dr. Hongrui Liu**
Battery Management System Design for Industrial Manufacture
H. Wang, S. Zhang, T. Qiu, H. Liu, L. He, Z. Wang, (2022) Proceedings of 2022 IEEE 25th International Conference on Computer Supported Cooperative Work in Design. Hangzhou, China.
Designing Battery Swapping Stations for Electric Scooters with a Streamlined Supply Chain
M. A. Shanbog*, H. Liu (2022), Proceedings of 2022 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Kuala, Malaysia, December 2022. (Accepted).
Energy Storage Potential Model for Residential Photovoltaic Systems
V. Rios*, Y. Wei, H. Liu (2022), Proceedings of 2022 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Kuala, Malaysia, December 2022. (Accepted).
- **Dr. Yupeng Wei**
Energy Storage Potential Model for Residential Photovoltaic Systems
Rios, V., Y. Wei, and H. Liu. 2022 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM). IEEE, 2022.
- **Dr. Gaojian Huang**
Designing and Evaluating Meaningful Tactile Displays to Assist Takeover in Automated Vehicles
Martinez, K., & Huang, G. (2022). In Adjunct Proceedings of the 14th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (pp. 34-38). <https://doi.org/10.1145/3544999.3552319>
A Systematic Review of Older Adults' Interactions with Smart Home Technology
Shah, M., Engelsens, A. M., & Huang, G. (2022).. In 2022 IEEE 3rd International Conference on Human-Machine Systems (ICHMS).
IEEE. <https://doi.org/10.1109/ICHMS56717.2022.9980777>
Investigating Users' Preferences in Adaptive Driving Styles for Level 2 Driving Automation
Sajedinia, Z., Akash, K., Zheng, Z., Misu, T., Dong, M., Krishnamoorthy, V., Martinez, K., Sureshbabu, K., & Huang, G. (2022).. In 14th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (pp. 162-170). <https://doi.org/10.1145/3543174.3546088>
Identification of Adaptive Driving Style Preference through Implicit Inputs
Zheng, Z., Akash, K., Misu, T., Krishnamoorthy, V., Dong, M., Lee, Y., & Huang, G. (2022 in SAE L2 Vehicles. In Proceedings of the 2022 International Conference

on Multimodal Interaction (ICMI) (pp. 468-475). <https://doi.org/10.1145/3536221.3556637>

The Impacts of Adaptive Driving Styles on Trust in Level 2 Automated Vehicles

Lee, Y. Y., Dong, M., Krishnamoorthy, V., Akash, K., Zheng, Z., Misu, T., & Huang, G. (2022). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 66, No. 1, pp. 345-345). Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/1071181322661327>

The Effects of Tactile Display on Automated Vehicle Takeover: A Literature Review

Martinez, K. D., & Huang, G. (2022). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 66, No. 1, pp. 1305-1309). Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/1071181322661391>

Effects of Alcohol Consumption on Driving: A Systematic Review

Dong, M., Lee, Y., Cha, J. S., & Huang, G. (2022). In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 66, No. 1, pp. 1481-1481). Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/107118132266132>

Exploring the Use of Public Transportation Among Older Adults During COVID-19 Pandemic: A Pilot Study

Summerville, S., Etu, E. E., Sureshababu, K., Parmar, A., & Huang, G. (2022).. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 66, No. 1, pp. 8-12). Sage CA: Los Angeles, CA: SAGE Publications. <https://doi.org/10.1177/1071181322661340>.

- **Dr. Joseph Barjis**

Model-Driven Organizational and Business Agility

Babkin, E (Editor), **Barjis, J (Editor)**, et al, (2022), Second International Workshop, MOBA 2022, Leuven, Belgium, June 6–7, 2022. Springer, [Available on Amazon](#).

ISE FACULTY / *STUDENT AWARDS
2021

Professional Society Award

Titan of HFE

Human Factors and Ergonomics
Society

Dr. Anthony Andre



[View HFES webpage](#)

ISE Department Awards

Newnan Student Excellence Award
(\$800)

Christina Nguyen
Senior, BSISE Program

Jindia Student Scholarship Award
(\$800)

Khaled El Droubi
Senior, BSISE Program

Externally Funded Grants and Contracts Awarded

- **Dr. Hongrui Liu**

Test/Research Market Clearing Systems for ISO New England, 2023. Awarded \$25,000

Test/Research Market Clearing Systems for ISO New England, 2022. Awarded \$25,000

- **Dr. Gaojian Huang**

Human-automation Interaction: Assistive and Adaptive Multimodal Interface to Support Older Adults in Complex Automated Systems

National Science Foundation. CRII: HCC: (Sole PI; \$174,800). 2022 – 2024.

Measuring Wellbeing in Hybrid Mobility

Honda Research Institute USA. (Sole PI; \$53,800). 2023.

Internally Funded Project Awards and Other Faculty Activities

Dr. Yupeng Wei

In-Situ Monitoring of Process Reliability in Fused Deposition Modeling

SJSU RSCA Seed Grant 2022-2023, Awarded amount: \$6,530.

Real-time In-Situ Monitoring System for Additive Manufacturing

Vy and Tim Li ISE Lab Award 2022-2023, Awarded amount: \$10,000.

Dr. Gaojian Huang

Modeling Mind Wandering and Task Performance in Semi-Autonomous Driving

SJSU Research, Scholarship, and Creativity Activity (RSCA) Level-Up Grant.
(PI; \$20,000). 2022 – 2023

Exploring the Effects of Meaningful Tactile Display on Perception and Preference in Automated Vehicle

Martinez, K., & Huang, G. (2022). . Mineta Transportation Institute.

<https://doi.org/10.31979/mti.2022.2164>

Exploring the Use of Public Transportation Among Older Adults During the COVID-19 Pandemic: A National Survey

Sureshbabu, K., Etu, E., Summerville, S., Parmar, A., & Huang, G. (2022). . Mineta Transportation Institute. <https://doi.org/10.31979/mti.2022.2204> (Featured in

Transportation Research Board Weekly Newsletter, National Academies of Sciences, Engineering, and Medicine, <https://www.trb.org/Main/Newsletter-230103.aspx>)

Invited Talks

Multimodal Information Presentation in Next-Generation Automated Vehicles

Huang, G. (2022).. Invited seminar. College of Charleston. November.

Visual, Auditory, or Tactile? The Design and Evaluation of Next-Generation In-Vehicle Human-Machine Interfaces.

Huang, G. (2022). Brownbag Seminar Series. North Carolina State University. October.

Human-Automation and Human-Robot Interactions

Huang, G. (2022).. Invited lecture in CS 789: Internet of Things. The University of Nevada. Las Vegas, NV. April.

Professional Presentations

Pressing Problems and Emerging Solutions in Aging Research

Huang, G. (presenter) (2022).. Oral presentation given at the 2022 Collaborative Symposium held by SJSU Center for Healthy Aging in Multicultural Populations (CHAMP) and Stanford Aging and Ethnogeriatrics (SAGE) Research Center. (Virtual). April.

Other Professional Activities

- Research Associate, Mineta Transportation Institute
- Faculty Affiliate, Center on Healthy Aging in Multicultural Population
- Session Chair, HFES Annual Meeting Surface Transportation Technical Group (STTG)
- Program Chair Elect, HFES Aging Technical Group

Dr. Abbas Moallem

- **Program Chair**, HCI-CPT: 5th International Conference on HCI for Cybersecurity, Privacy and Trust
- **Program Chair**, 9th International Conference on Human Factors in Cybersecurity

Mr. Dan Rosenberg

- **Tutorial**: Fundamentals in Data Visualization and Dashboard Design, AHFE International 2023
- **Tutorial**: Human Factors and Cybersecurity:, AHFE International 2023