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and Ergonomics
Conference
Hawaii
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AHFE
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Computing (AHFE Hawaii Edition)
Final Program
1-3 December, 2026
Hyatt Regency Waikiki
Honolulu, Hawaii, USA
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Opening Plenary Session and Keynote Address

9:00- 9:40 (HST), Tuesday, December 1, 2026
Makai Ballroom, Hyatt Regency Waikiki

Opening Remarks

9:00–9:40 (HST), Tuesday, December 1, 2026
Opening Remarks
Prof. Waldemar Karwowski, General Chair

Keynote Address

Human-Centered AI and the Future of Digital Healthcare

Dr. Farzan Sasangohar
Texas A&M University, USA

Speech Summary: Healthcare is undergoing a transformation from episodic treatment to continuous, personalized, and proactive care. At the center of this transformation lies the convergence of artificial intelligence (AI), digital health technologies, and human-centered systems design. In this keynote, Dr. Farzan Sasangohar will explore how human-centered AI can support continuous monitoring and self-management of mental health and chronic conditions. Through examples from interdisciplinary research and applied healthcare innovation, the talk will highlight the development and evaluation of AI-enabled digital interventions designed to enhance accessibility, engagement, personalization, and clinical impact. The presentation will examine how intelligent systems can leverage wearable sensing, behavioral data, and adaptive analytics to provide real-time insights, personalized recommendations, and proactive support while maintaining usability, trust, and patient autonomy. Key challenges, including ethical AI, implementation barriers, privacy, explainability, and integration into healthcare workflows, will also be discussed. By bridging human factors engineering and AI, this keynote will outline a vision for the next generation of healthcare systems: systems that continuously support individuals, adapt to their needs, and place humans at the center of technological innovation.

BIO: Dr. Farzan Sasangohar is a Professor of Industrial and Systems Engineering and Environmental and Occupational Health at Texas A&M University. He is the co-author of Design for Health: Applications of Human Factors in Healthcare and has authored over 110 peer-reviewed journal articles. He currently serves as the Editor-in-Chief of Human Factors in Healthcare and as the Secretary-Treasurer of the Human Factors and Ergonomics Society (HFES). He has received numerous international awards for research, teaching, and service, including the Technical Innovations in IE and the Hamed K. Eldin Outstanding Early Career IE in Academia Award from the Institute of Industrial and Systems Engineers (IISE); the Jack A. Kraft Innovator Award, William C. Howell Young Investigator Award, and Bentzi-Karsh Early-Career Service Award from HFES; and the Kingfar Young Researcher Award from the International Ergonomics Association (IEA). Dr. Sasangohar's research interests include digital health and monitoring tools aimed at workers' physical and mental health and performance in sociotechnical systems.

Access to the Conference Scientific and Technical Program will be available through the AHFE Submission System

Conference Reception/Banquet: Tuesday Dec 1 • 18:00-20:00 (HST)
NĀLE'A Terrace (3rd Floor, Ocean Front, Diamond Head), Hyatt Regency Waikiki
Address: 2424 Kalākaua Ave, Honolulu, Hawaii 96815
(Badge Required - Dress is business casual)

Conference at a Glance

Conference program schedule listed in Honolulu, Hawaii Time Zone (HST)

Registration Desk and Conference Scientific and Technical Program: December 1–3, 2026
Location: Hyatt Regency Waikiki – Mauka Foyer (Check conference layout page)
Address: 2424 Kalākaua Ave, Honolulu, HI 96815

#	Session Title	Track	Room
	Tuesday, December 1, 2026 - Session Time: 10:00–11:00 (HST)		
1	Application of Emerging Technologies I	AET	AHFE 1: Makai
2	Artificial Intelligence and Social Computing I	AISC	AHFE 2: Maloko
3	Human-Centered Design and Design for Inclusion I	HCD	AHFE 3: Mauka
4	Human–Computer Interaction: Cognitive and Workload Factors I	HCI	AHFE 4: Ekahi
5	Human-Technology and Future of Work I	HTFW	AHFE 5: Elua
	Refreshments: 11:00–11:20 (HST)		
	Tuesday, December 1, 2026 - Session Time: 11:20–12:20 (HST)		
6	Applications of Technologies in Healthcare and Cognitive Assessment I	HCA	AHFE 1: Makai
7	Human-Centered Design and Design for Inclusion II	HCD	AHFE 2: Maloko
8	Human–Computer Interaction: Cognitive and Workload Factors II (Virtual Session)	HCI	AHFE 3: Mauka
9	Industrial and Systems Engineering Application: Safety and Simulation I (Virtual Session)	ISE	AHFE 4: Ekahi
10	Panel: Applications in Training, Learning and Education	GEN	AHFE 5: Elua
	Refreshments: 12:20–12:40 (HST)		
	Tuesday, December 1, 2026 - Session Time: 12:40–14:00 (HST)		
11	Human Centered Integration for Fit, Safety, and Performance	HFE	AHFE 1: Makai
12	Human–Computer Interaction: Cognitive and Workload Factors III	HCI	AHFE 2: Maloko
13	Wearable Technologies, Social and Affective Computing I (Virtual Session)	WTSAC	AHFE 3: Mauka
14	Sustainable Technologies and Business Applications I	ETBA	AHFE 4: Ekahi
15	Human-Centered Design and Design for Inclusion III (Virtual Session)	HCD	AHFE 5: Elua
	End of Day 1 Technical Sessions		

Conference at a Glance

Conference program schedule listed in Honolulu, Hawaii Time Zone (HST)

#	Session Title	Track	Room
	Wednesday, December 2, 2026 - Session Time: 9:00–10:00 (HST)		
16	Human-Centered Design and Design for Inclusion IV	HCD	AHFE 1: Makai
17	Human-Technology and Future of Work II	HTFW	AHFE 2: Maloko
18	Industrial and Systems Engineering Application: Safety and Simulation II	ISE	AHFE 3: Mauka
19	Computation and Intelligent Design I	CID	AHFE 4: Ekahi
	Refreshments: 10:00–10:20 (HST)		
	Wednesday, December 2, 2026 - Session Time: 10:20–11:20 (HST)		
21	Application of Emerging Technologies II	AET	AHFE 1: Makai
22	Human-Centered Design and Design for Inclusion V	HCD	AHFE 2: Maloko
23	Human–Computer Interaction: Cognitive and Workload Factors IV	HCI	AHFE 3: Mauka
24	Sustainable Technologies and Business Applications II	ETBA	AHFE 4: Ekahi
25	Advances in Transportation I	TRANS	AHFE 5: Elua
	Refreshments: 11:20–11:40 (HST)		
	Wednesday, December 2, 2026 - Session Time: 11:40–12:40 (HST)		
26	Applications of Technologies in Healthcare and Cognitive Assessment II	HCA	AHFE 1: Makai
27	Human-Centered Design and Design for Inclusion VI	HCD	AHFE 2: Maloko
28	Wearable Technologies, Social and Affective Computing II	WTSAC	AHFE 3: Mauka
29	Industrial and Systems Engineering Application I	ISE	AHFE 4: Ekahi
30	Applications in Training, Learning and Education I	TLS	AHFE 5: Elua
	Refreshments: 12:40–13:00 (HST)		
	Wednesday, December 2, 2026 - Session Time: 13:00–14:30 (HST)		
31	Human-Centered Design and Design for Inclusion VII	HCD	AHFE 1: Makai
32	Human–Computer Interaction: Cognitive and Workload Factors V (Virtual Session)	HCI	AHFE 2: Maloko
33	Human-Technology and Future of Work III	HTFW	AHFE 3: Mauka
34	Applications in Training, Learning and Education II (Virtual Session)	TLS	AHFE 4: Ekahi
35	Ethical Issues and Considerations in Human Factors	EIC	AHFE 5: Elua
	End of Day 2 Technical Sessions		

#	Session Title	Track	Room
	Thursday, December 3, 2026 - Session Time: 9:00–10:00 (HST)		
36	Applications of Technologies in Healthcare and Cognitive Assessment III	HCA	AHFE 1: Makai
37	Human-Centered Design and Design for Inclusion VIII	HCD	AHFE 2: Maloko
38	Wearable Technologies, Social and Affective Computing III	WTSAC	AHFE 3: Mauka
39	Industrial and Systems Engineering Application II	ISE	AHFE 4: Ekahi
40	Augmented, Virtual and Mixed Reality Simulation I	AVM	AHFE 5: Elua
	Refreshments: 10:00–10:20 (HST)		
	Thursday, December 3, 2026 - Session Time: 10:20–11:20 (HST)		
41	Human-Centered Design and Design for Inclusion IX	HCD	AHFE 1: Makai
42	Human–Computer Interaction: Cognitive and Workload Factors VI	HCI	AHFE 2: Maloko
43	Computation and Intelligent Design II	CID	AHFE 3: Mauka
44	Advances in Transportation II	TRANS	AHFE 4: Ekahi

Conference program schedule listed in Honolulu, Hawaii Time Zone (HST)

	Refreshments: 11:20–11:40 (HST)		
	Thursday, December 3, 2026 - Session Time: 11:40–12:40 (HST)		
46	Artificial Intelligence and Social Computing II	AISC	AHFE 1: Makai
47	Human-Centered Design and Design for Inclusion X	HCD	AHFE 2: Maloko
48	Human–Computer Interaction: Cognitive and Workload Factors VII	HCI	AHFE 3: Mauka
49	Augmented, Virtual and Mixed Reality Simulation II	AVM	AHFE 4: Ekahi
	Refreshments: 12:40–13:00 (HST)		

#	Session Title	Track	Room
	Thursday, December 3, 2026 - Session Time: 13:00–14:30 (HST)		
51	Applications of Technologies in Healthcare and Cognitive Assessment IV	HCA	AHFE 1: Makai
52	Human-Centered Design and Design for Inclusion XI	HCD	AHFE 2: Maloko
53	Industrial and Systems Engineering Application III	ISE	AHFE 3: Mauka
54	Applications in Training, Learning and Education III	TLS	AHFE 4: Ekahi
	End of Day 3 Technical Sessions		

#	Interactive Poster Demonstrations	Track	Room
Tuesday, December 1, 2026 - Session Time: 10:00–14:00 (HST)			
A	Poster Demonstration Session A	ALL	Mauka Foyer
Wednesday, December 2, 2026 - Session Time: 10:00–14:00 (HST)			
B	Poster Demonstration Session B	ALL	Mauka Foyer
Thursday, December 3, 2026 - Session Time: 10:00–14:00 (HST)			
C	Poster Demonstration Session C	ALL	Mauka Foyer
	Virtual Poster Room: AHFE Posters		

1	**Application of Emerging Technologies I** Co-Chairs: Debra Henneberry and Benedetta Russo, USA	AET
10:00-11:00 (HST) AHFE 1: Makai	The evolution of ADAS safety: A human factors perspective Iiona Scully, Abigail Swenson, Stephanie Reeves, David Cades, USA Digital fitting for resource optimization: Hybrid practices for sustainable accessory design Tommaso Roviello, Benedetta Russo, Clara Bassano, Paolo Piciocchi, Italy Designing and implementing a total pilot performance course for undergraduate aviation students Debra Henneberry, Julius Keller, USA Development of an AI agent for failure monitoring, diagnosis, and remaining useful life prediction of capacitors in nuclear safety system signal processors Sangjun Park, Chang Hwoi Kim, South Korea From emerging technologies to operational capability: Human-centred transition pathways for AI implementation Debra Henneberry, Dimitrios Ziakkas, Ian Roth, USA/UK From success factors to structured judgement: A preliminary web-based decision support system for early-stage real estate readiness assessment Alaa Abdou, Mohamed Zaghloul, Sahar Makky, Yousef Abdou, UAE	

2	**Artificial Intelligence and Social Computing I** Co-Chairs: Vineetha Menon and Nicholas Loyd, USA	AISC
10:00-11:00 (HST) AHFE 2: Maloko	Tangible card topologies or text prompts? Comparing AI-human co-creative storywriting methods Yaojiong Yu, China Decoding the language of team performance: A machine learning framework for sentiment-based performance modeling and team situational awareness Gracie Gray, Vineetha Menon, Kristin Weger, Bryan Mesmer, Nicholas Loyd, USA The AXTENI Framework: Redefining leadership authority in the age of agentic AI Leila Halawi, Mark Miller, Sam Holley, USA A rank-based analysis of AI consistency in shortlisting top software systems by usability: Learning management systems as an example Victor K. Y. Chan, Macau SAR China (Virtual) Fostering empathic attitudes through conversational generative AI: Effects of cognitive empathy interventions and human-like identity Tsubasa Kishiume, Taiyo Kojima, Toshikazu Kato, Takashi Sakamoto, Toru Nakata, Japan	

3	**Human-Centered Design and Design for Inclusion I** Co-Chairs: Daigo Misaki, Japan and Jennie Lai, USA	HCD
10:00-11:00 (HST) AHFE 3: Mauka	Designing human–AI interaction to foster ambidextrous thinking and learner ownership in product ideation Daigo Misaki, Joohan Bae, Komei Miura, Japan Designing perimenopause care using disaggregated data for Asian American women Jennie Lai, Qin Jing, Nancy Jiang, Stella Yi, USA Exploring the factor structure and external correlates of design attitude Mika Isobe, Yumin Wang, Yoshikuni Edagawa, Japan Parametric design of HEV intake grilles through traditional pattern translation based on FCM and XGBoost Yichen Tian, Zimo Chen, Shuài Zhā ng, China (Virtual) What may and may not be digitized: Two boundaries on digital transformation in traditional crafts and their implications for service design — A case study of Japanese Kaga Yuzen Yuka Ishiba, Yasunobu Ito, Japan (Virtual) Postpartum women's experiences with digital health resources and support needs: A qualitative study and design implications Qi Kong, Buzhou Tang, China (Virtual)	

4	**Human–Computer Interaction: Cognitive and Workload Factors I** Co-Chairs: Adem Boudjemline and Clément Bougard, France	HCI
10:00-11:00 (HST) AHFE 4: Ekahi	Unimodal vs. multimodal trajectory anticipation cues for motion sickness mitigation in autonomous vehicles: An on-road study Adem Boudjemline, Lionel Bringoux, Clément Bougard, France Physiological indicators of trust in AI-assisted air traffic control: A multimodal eye-tracking and EEG study Wenqian Qi, Xing Yao, Bufan Liu, Liu Xinyu, Hu Li, Tianjiao Zhang, Xiaoqing Yu, China Updated comparative analysis between recent 3D object generation models: Adaptation to immersive technologies Geovana Amorim Abensur, Agustín A. Ortiz Diaz, Sergio Cleger Tamayo, Delrick De Oliveira Freitas, Paulo Sergio Da Silva Farias, Gilberto Oliveira Neto, Gabriel Rossi Zanini, Brazil Evaluation of gesture separability and stability based on surface electromyography for general interaction design Hao Shi, China (Virtual) SPARC: An interactive virtual environment for eliciting and organizing place-based memories in historic districts Tianyi Liu, Zaixun Chen, Quhang Wu, Huishu Deng, China (Virtual)	

5	**Human-Technology and Future of Work I** Co-Chairs: Melissa McLain and Yunfeng Chen, USA	HTFW
10:00-11:00 (HST) AHFE 5: Elua	Impact of body mass index, tenure length, and age on physical exertion of transportation maintenance workers during simulated asphalt shoveling Xinran Hu, Xingzhou Guo, Yunfeng Chen, Jiansong Zhang, USA Beyond true or false: Measuring information discernment in a simulated joint operations environment Melissa McLain, Sarah Bostrom, Richard Niemeyer, Leanne Hirshfield, USA A multidimensional framework for assessing human-AI collaboration in military operations: The CogARMY Teamwork Index (CTI) Tanya Paul, Daniel Lafond, Dale Richards, Gianluca Borghini, Johan DeHeer, France Bridging the gap between human factors and autonomous vehicle decision-making and control: A conceptual framework for behavioural acceptance Joshua D'Souza, Jisun Kim, UK	

6	**Applications of Technologies in Healthcare and Cognitive Assessment I** Co-Chairs: Bryan Johnston, Canada, and Zun-hwa Chiang, Taiwan	HCA
11:20-12:20 (HST) AHFE 1: Makai	Reducing nursing communication burden through a digital health passport platform: A patient-centered UX design approach Zun-hwa Chiang, Cheng-Yun Wu, Wei-wei Su, Taiwan An entrustment-based human factors framework for integrating artificial intelligence into healthcare and medical education Bryan Johnston, Scott Adams, Kiven Erique Lukong, Jawahar (Jay) Kalra, Canada ConoCancer: A RAG-based Chatbot for breast cancer health literacy Alexa Rivera, Anika Bokka, Francisco Iacobelli, Renu Balyan, USA IBUFUNDA: A smart mattress-topper for real-time pressure-injury risk monitoring and caregiver support Finny Gaddala, Laavanya Rachakonda, Kevin Craig, Ajay Kumara Makanahalli Annaiah, USA Utilization of multi-stakeholder visualization in medical management strategy development: A case study of the BSP cardiovascular detection project Shunjia Zhang, Yuan Liu, China (Virtual) Designing a nurse-centered wellness application for early-career nurses: A qualitative user-centered approach Aleena McGhee, Bunyamin Ozaydin, Akanksha Singh, USA (Virtual)	

7	**Human-Centered Design and Design for Inclusion II** Co-Chairs: Taiga Fukuzawa, Japan and Melissa Peterson, USA	HCD
11:20-12:20 (HST) AHFE 2: Maloko	Flipping through my day: Reimagining the digital calendar through novelistic translation and progressive narrative delivery Tzu-Wen Tsai, Rung-Huei Liang, Taiwan Creating a path to mastery: Impacts of machine-learning guidance on novice software users Melissa Peterson, USA Effects of viewpoint position and display device on operators' driving workload in vehicle teleoperation systems Taiga Fukuzawa, Kazunori Kaede, Yusuke Osawa, Keiichi Watanuki, Japan Cycling by disabled people in Japan: Current situation and future possibilities Yoshito Dobashi, Japan (Virtual) User-centered transmedia storytelling design for urban landmarks: A case study of Shenzhen's Bay Glory Ferris Wheel Xinliang Chen, Xin Xie, China (Virtual) From resources to stories: An experiential narrative design for children's ecological field studies in Oct Wetland Park Xiaobao Yu, Miao Fu, China (Virtual)	

8	**Human–Computer Interaction: Cognitive and Workload Factors II (Virtual Session)** Co-Chairs: Olarinde Farayola, USA and Yingjiao Jia, China	HCI
11:20-12:20 (HST) AHFE 3: Mauka	Toward a human-centered framework for digital health accessibility among ASL-dominant users Olarinde Farayola, Kathy Wang, USA (Virtual) The impact of gamification elements in art therapy on behavioral intention among university students with trait anxiety: A self-determination theory perspective Yingjiao Jia, Hsin-Hsien Chiu, China (Virtual) Customer churn prediction for consumer-facing delivery Apps Muhammad Jawad Mufti, Omar Hammad, Haitham Saleh, Muqaddas Gull, Saudi Arabia (Virtual) Exploring user perceptions of their role in personalization on YouTube Mohammed Muheeb Faizan Ghori, Arman Dehpanah, Bamshad Mobasher, USA (Virtual) Qualitative study updated with recent 3D object generation models for immersive technologies Pio Ordozgoith, Gilberto Oliveira Neto, Agustín A Ortiz Diaz, Sergio Cleger Tamayo, Heider Betcel Lima De Souza, Geovana Amorim Abensur, Delrick De Oliveira Freitas, Gustavo De Freitas Martins, Osvaldo Junior, Brazil (Virtual)	

9	**Industrial and Systems Engineering Application: Safety and Simulation I (Virtual Session)** Co-Chairs: Wu Xu, China and Michaela Friedrich, Germany	ISE
11:20-12:20 (HST) AHFE 4: Ekahi	System safety analysis considering human factors in aircraft development Wu Xu, Ma Shuai, Jia Wanchen, Ding Lin, Miao Chongchong, Zhang Ruiming, China (Virtual) Designing sustainable business models for industrial service providers – concepts and challenges Michaela Friedrich, Christian Schiller, Germany (Virtual) Runway incursions at U.S. airports, 2017-2026: How airfield geometry, operations, and human factors shape safety Jules Roa, Lilian Annan, USA (Virtual) Human factors and propulsion failures in U.S. general aviation accidents: What a decade of NTSB findings implies for electric training aircraft Jules Roa, Mehdy Emad Araim, USA (Virtual) Scientific trends in data mining and university dropout prediction: A bibliometric review and network mapping Carlitos Guano, Georgina Arcos, Luis Patiño, Marco Antonio Yandun Velastegui, Ecuador (Virtual) Operationally conditioned transit injury risk: A national machine learning analysis of safety, mobility, and socioeconomic exposure Timothy Kangogo, Oladotun Adeola, Barbara Asamoah, Anthony Dontoh, Judith Mwakalonge, Gurcan Comert, Varghese Vaidyan, Vijay Bendigeri, USA	

10	**Panel: Applications in Training, Learning and Education** Chair: Farzan Sasangohar, USA	General: Other
11:20-12:20 (HST) AHFE 5: Elua	From academic publications to practice: The lasting influence of HFE Farzan Sasangohar, Rose Figueroa, Jackie Cha, USA	

11	**Human Centered Integration for Fit, Safety, and Performance** Co-Chairs: Nathaniel Newby and Linsey Griffin, USA	HFE
12:40-14:40 (HST) AHFE 1: Makai	Spaceflight injury biomechanics and occupant protection Nate Newby, Yaritza Hernandez, K. Han Kim, USA Assessment of curved body armor plate designs for improved protection and mobility in soldiers Meghan DeClue, Scott Marriner, Lavina Burman, Iris Matthews, K. Blake Mitchell, Ericka Rovira, Hyegjoo E. Choi-Rokas, USA Human testing of spacesuit size preference using 3D printed mockups Cassandra Vining, Chris Miller, K. Han Kim, Nate Newby, Yaritza Hernandez, USA Hand anthropometry across occupational populations: Comparing industrial workers to military reference standards Linsey Griffin, Vanessa Segura, USA Development and application of a 3D data reliability analysis platform for anthropometric measurement Vanessa Segura, Linsey Griffin, USA Operational volume for spacesuit donning and doffing Garima Gupta, K. Han Kim, Joseph Yao, Cassandra Vining, Pouyan Sabahi, Nate Newby, USA Strength capability assessment for extravehicular activity hatch operation Michael Schlittenhart, Nate Newby, Joseph Yao, USA	

12	**Human–Computer Interaction: Cognitive and Workload Factors III** Co-Chairs: Iara Margolis, Portugal and Nan Jiang, China	HCI
12:40-14:00 (HST) AHFE 2: Maloko	Beyond immersion: The influence of interactivity on user experience in VR-based robotics learning Iara Margolis, Eduardo Santos, Francisco Silva, Carlos Costa, Miguel Nunes, Alexandre Ferreira, Andreia Mendes, Alexandre Carrança, Arabela Fabre, Diogo Silva, Carolina Pimenta, Ana Alves, José Rocha, Nuno Sousa, Portugal AI-enhanced live-streamed English language learning: Designing and evaluating an intelligent platform for Chinese learners Nan Jiang, Chengcheng Ma, Peter Childs, China "They Will Move": Confirmation bias, expectation frames, and premature monitoring drop off in COLREG encounters Felix-Marcel Petermann, Ole Andreas Alsos, Jooyoung Park, Erik Styhr Petersen, Norway Visualizing pay-what-you-want donation bursts using Bubble Charts and LLM-based conversation analysis: Evidence from Twitch Subscription Gifting Hisayuki Kunigita, Japan When transparency is beneficial or detrimental: Designing a contextual dual-path model based on trust in AI systems Yuchen Zhang, Zhicheng Xu, Xuanyu Niu, Yijing Zhou, Ziao Ni, China (Virtual) Automation transparency communication does not improve supervisory control performance, but shapes operator trust Kaylin Strong, Bailee Smith, Jill Shelton, Shannon McGarry, Joseph Coyne, Noelle Brown, USA	

13	**Wearable Technologies, Social and Affective Computing I (Virtual Session)** Co-Chairs: Jamie Johann Tan, Singapore and Cathy Chen, USA	WTSAC
12:40-14:00 (HST) AHFE 3: Mauka	Urban context and travel experience events: An exploratory comparison of two German cities Marie Güntert, Esther Bosch, Germany (Virtual) Beyond formal likeness: A four-tier evaluation framework for stylistic fidelity in AI generated Chinese ink videos Yilin Wang, China (Virtual) Designing a gamified Hawker centre simulation for language and cultural learning in Singapore Jamie Johann Tan, Kenneth Y. T. Lim, Singapore (Virtual) Actuation feasibility and cost floor for a low-cost active knee–ankle–foot orthosis: A parametric biomechanical analysis Cathy Chen, USA (Virtual) Assessing the effects of self-contained breathing apparatus (SCBA) weight on firefighters' muscle activation and fatigue with electromyography (EMG) Susan Xu, Neethan Ratnakumar, Rachel Jones, Jeffrey Powell, Ziqing Zhuang, Xianlian Zhou, USA	

14	**Sustainable Technologies and Business Applications I** Co-Chairs: Subashree Dinesh, USA and Petr Zamecnik, Czech Republic	ETBA
12:40-14:00 (HST) AHFE 4: Ekahi	The FLOODPERCEP dataset: Flood hazard maps and imagery for studying human perception of flood risk Amir Behzadan, Subashree Dinesh, Armita Dabiri, Arunima Maitra, USA Distance-dependent robustness of WiFi CSI-based movement detection under outdoor LoS and NLoS conditions Prasanta Kr Sen, Mrigank Sharad, Ram Babu Roy, India Psychological foundations of epistemic profiles for misinformation resilience: Implications for defence-oriented agent-based modelling Petr Zamecnik, Darina Zamecnikova, Czech Republic Designing integrated human-AI systems: A socio-technical approach to knowledge management in healthcare Kristin Weger, Vineetha Menon, Jennifer Bail, USA Architecting an integrated data management and governance ecosystem for enhancing micro, small, and medium enterprises (MSMEs) promotion in Thailand Varit Intrama, Thailand A regulatory and human factors approach to overreliance in legal information Chatbots Niki Georgiadou, Maria Rigou, Greece (Virtual)	

15	**Human-Centered Design and Design for Inclusion III (Virtual Session)** Co-Chairs: Monika Wiechers, Germany and Valeria Minucciani, Italy	HCD
12:40-14:00 (HST) AHFE 5: Elua	An analysis of handoff processes in global teams Daniel Cunha, Katleen Picanço, Barbara Silva, Lanier Santos, Erick Bezerra, Brazil (Virtual) Towards participatory requirements gathering of constantly evolving user needs for Smart Cane+ Monika Wiechers, Celina Mae Kong, Birgit Bomsdorf, Germany (Virtual) Rethinking inclusivity in dissonant heritage Valeria Minucciani, Gabriella Dalla Serra, Italy (Virtual) Trend analysis of cognitive ability in three long-duration working groups based on piecewise linear regression Si Li, Xiaoyi Zhou, Yang Yu, Liping Pang, Liang Zhang, Ziang Chen, China (Virtual) Crew cognition management (CCM): A comprehensive design methodology for civil aircraft Lei Wang, Jiangping Chu, Lei Wu, China (Virtual) From awareness to action: Designing a progressive cross-device intervention ecosystem for sedentary behavior among young adults Tianmei Zhang, Jie Tan, Luyu Song, Jianbin Wu, China (Virtual)	

16	**Human-Centered Design and Design for Inclusion IV** Co-Chairs: Natsumi Takahashi and Indranil Bhattacharjee, Japan	HCD
9:00-10:00 (HST) AHFE 1: Makai	Governing agentic AI workflows: Balancing automation and human oversight in enterprise practice Natsumi Takahashi, Indranil Bhattacharjee, Japan Human-centred adaptive reuse of building heritage: A comparative ex-post and ex-ante evaluation of abandoned areas in Maribor, Slovenia Vesna Zegarac Leskovar, Vanja Skalicky Klemenčič, Slovenia DEM Cropper: A web-based geospatial processing system for physical terrain representation Loelle Lam, Nurit Kirshenbaum, USA Modeling individual differences in motivational responses for personalized support of sustained behavior change toward well-being Toshikazu Kato, Rikuto Fukada, Takashi Sakamoto, Toru Nakata, Japan Selection of underwear materials for comfortable sleeping in summer evacuation shelters Tamaki Mitsuno, Kaoru Wakatsuki, Japan Human- AI teaming in life coaching: Evaluating LLM role fit through coaching competency and mentor coach perspective Ravneet Kaur, Satarupa Mukherjee, USA (Virtual)	

17	**Human-Technology and Future of Work II** Co-Chairs: Eduardo Davalos, USA and Izza Anwer, Pakistan	HTFW
9:00-10:00 (HST) AHFE 2: Maloko	Bridging the gap between saviours and survivors: Exploring uncertainties in search, rescue, emergency, and evacuation operations in earthquake and flood Izza Anwer, Irfan Yousuf, Pakistan Does AI assistance leave a temporal fingerprint? Detecting overreliance in AI-assisted writing and programming Eduardo Davalos, Yike Zhang, USA Calibrating managers' trust in ICT-enabled visualized information: A case study of heat illness prevention at infrastructure maintenance sites Atsunori Someya, Kotomichi Matsuno, Manabu Sawaguchi, Japan Redesigning work in industrial control rooms: Intelligent system interfaces that preserve human decision authority while maintaining efficiency Peta Chirgwin, Australia (Virtual) Is situation awareness related to pupillary changes during a flight navigation simulation? Shannon McGarry, Allison Bayro, Michael Kukenberger, Heejin Jeong, Joseph Coyne, USA	

18	**Industrial and Systems Engineering Application: Safety and Simulation II** Co-Chairs: Masataka Kanzaki, Japan and Erman Çakıt, Turkey	ISE
9:00-10:00 (HST) AHFE 3: Mauka	Human-centered creative support for VE idea realization through contradiction analysis Masataka Kanzaki, Akagi Koichi, Hikaru Takashima, Manabu Sawaguchi, Japan Improving sitting posture with back-pressure stimulation from a carbon-fiber-reinforced plastic chair Shigekazu Ishihara, Hiroyoshi Ohara, Japan Integrating ergonomics, lean manufacturing, and work study to improve overall system performance within industry 5.0 Erman Çakıt, Turkey Hindrances to understanding and identifying hazards in the workplace: A systematic literature review Olumide Adewumi, Jeremy Gouzd, USA (Virtual) A replicable two-phase field protocol for assessing fatigue risk in aircraft line maintenance: Design and operational applicability Mundhir Nasser Ali Al Alawi, Ashish Kumar Singh, Noraisikin Sabani, Jundika Candra Kurnia, Malaysia (Virtual) Docking station for UAV for autonomous critical infrastructure inspection Antoni Kopyt, Poland	

19	**Computation and Intelligent Design I** Co-Chairs: Debasis Bhattacharya, USA and Micael Gonçalves, Portugal	CID
9:00-10:00 (HST) AHFE 4: Ekahi	Integrating local LLMs in higher education for privacy, security, and cost effectiveness Debasis Bhattacharya, USA Design of graphical user interfaces for validation of steering-wheel HMI solutions Micael Gonçalves, Lídia Lemos Ribeiro, Hugo Rodrigues, Marc Schledorn, Nélson Costa, Portugal Intelligent design architectures for human-AI teaming in safety-critical operations Debra Henneberry, Dimitrios Ziakkas, Thanasis Binis, USA/UK Sharing the edge: Multiple concurrent neural workloads on a single microcontroller in a smart HVAC vent Yousef Abdou, Hazem Elshorbagy, Alaa Abdou, UAE Metacognitive scaffolding for novice designers in generative AI-assisted poster design: A formative study of premature convergence Shuai Sun, Yu Yangwenqing, China (Virtual) Human-object interaction spatial constraint-driven intelligent generative design for products Yaqi Li, Hao Shi, China (Virtual)	

21	**Application of Emerging Technologies II** Co-Chairs: Naqash Gerard and Jeremy Gottlieb, USA	AET
10:20-11:20 (HST) AHFE 1: Makai	The integration of eye tracking and electrodermal activity measures for assessing cognitive load and mental fatigue in engineering and computing: A systematic review (2010-2025) Naqash Gerard, Idalis Villanueva, USA Exposing tool use in AI-assistant interfaces: Inspectable evidence for industrial assistance Andrea Alesani, Finland Applying formal methods to an augmented reality interface Jeremy Gottlieb, Dan Bryce, Mieszko Muskala, Stephen Gilbert, Michael Dorneich, Shayama Khan, Maral Jafari Ranjbar, Eliot H. Winer, John Skovbekk, Robert Goldman, David Musliner, USA Room-scale digital twin sensing for quantifying young children's gaze-based interest and movement behavior Yuya Kawabe, Shihomi Kuribayashi, Koji Kitamura, Tatsuhiro Yamanaka, Yoshifumi Nishida, Mikiko Oono, Japan A concept of using UAV in urban air mobility for parcel delivery Antoni Kopyt, Poland (Virtual)	

22	**Human-Centered Design and Design for Inclusion V** Co-Chairs: Julia Czerniak-Wilmes, Switzerland and Ting Liao, USA	HCD
10:20-11:20 (HST) AHFE 2: Maloko	Human-centered design of AI decision support: Algorithmic vigilance and the role of AI literacy Julia Czerniak-Wilmes, Lukas Messmer, Leonie Däullary, Teuta Salii, Philipp Rüegg, Frieder Loch, Switzerland When helpful AI feels too trustworthy: Engagement and reliance in design ideation Ting Liao, Jiacheng Sun, USA Understanding the needs and constraints of speech-language pathologists when using technological devices in rehabilitating people with aphasia Emilie Grandgirard, Laura Wallard, Christian Bastien, Christophe Kolski, Eugénie Avril, France Towards a robust human centered medical research data access tool: A mixed-methods usability study of DataLENS Mya Averett, Matthew Wyatt, Akanksha Singh, USA Constrained but capable: Motivation, persistence, and early-stage attrition among Nascent women entrepreneurs Lake Crowell-Mitchell, Quintin Williams, USA (Virtual) SENSEHOME: Supporting emotion-driven interior design decisions through color psychology and augmented reality Wang Zhou, Meiyu Zhou, China (Virtual)	

23	**Human–Computer Interaction: Cognitive and Workload Factors IV** Co-Chairs: Mickael Causse, France and Laura Martinez-Tejada, Japan	HCI
10:20-11:20 (HST) AHFE 3: Mauka	The influence of neuroticism on startle and surprise response: A flight simulator study Mickael Causse, Maud Dupuy, Alexandre Duchevet, Nadine Matton, Flora Schwartz, Jean-Paul Imbert, Jonathan Deniel, France EEG-based classification of reward, penalty, and movement events across four video games of varying complexity Laura Martinez-Tejada, Dechathron Dasri, Yuta Yamamura, Natsue Yoshimura, Japan The effects of task similarity and time pressure on task performance following interruptions in complex human-computer interaction systems Yuzheng Li, Weining Fang, Zhe Sun, Yirui Han, China Trusting the chain, not the black box: A provenance-based architecture for human-machine teaming in military autonomy Richard Stone, Michael Jenkins, Joseph Fernandez, USA (Virtual) Design of a simplified humanoid robot face: Cultural differences and emotional synchronization Meina Tawaki, Ichi Kanaya, Keiko Yamamoto, Japan (Virtual)	

24	**Sustainable Technologies and Business Applications II** Co-Chairs: Fathima Lodi and Debra Henneberry, USA	ETBA
10:20-11:20 (HST) AHFE 4: Ekahi	Detecting information leakage in predictive process mining: A three-layer evaluation framework Fathima Lodi, Amir Schur, USA Building sustainable business value through human-centred AI transition pathways Dimitrios Ziakkas, Debra Henneberry, UK/USA From water quality data to sustainable innovation: Designing learning ecosystems for systemic transformation Jari Jussila, Andreea Cotoranu, John Cronin, Markku Mikkonen, Finland (Virtual) From inquiry to handoff: A reference architecture and design implications for photorealistic conversational AI agents in first-contact services Nick Tugarin, Christian van Husen, Germany (Virtual) Making a case for construction genome: defining the fundamental genetic code of construction processes Clinton Aigbavboa, Pelumi Adetoro, Aghimien Douglas, Opeoluwa Akinradewo, Simon Ofori Ametepey, Matthew Ikuabe, John Aliu, South Africa	

25	**Advances in Transportation I** Co-Chairs: David Kaber and Amir Milad Moshref Javadi, USA	TRANS
10:20-11:20 (HST) AHFE 5: Elua	Evaluation of models of functional automation and driver SA in automated vehicle control Yunmei Liu, David Kaber, USA Visual attention, recognition, and driver response during emergency-vehicle encounters in a VR driving simulator Lanmin Liu, Robert Kluger, USA Trust calibration in semi-automated rural driving under reduced visibility: Effects of visibility and collision-warning context on driver reliance Amir Milad Moshref Javadi, Tekalign Mengistu, Natnael Takele, Steven Jiang, Ali Karimoddini, USA A controlled methodology for the development and evaluation of driver alcohol intoxication detection systems: From simulator to proving ground Francesco Deiana, Clara Coll De La Rubia, Elena Castro, Cristina Periago, Spain From driver intent to road-user perception: A narrative and systematic review of perceived aggressive driving Yan Chen, Moajjem Chowdhury, Yunmei Liu, USA (Virtual) A vision-based framework for detecting overtakes and quantifying novice driver responses in continuous simulator traffic Udit Kumar Das, Yan Chen, Moajjem Chowdhury, Yunmei Liu, USA (Virtual)	

26	**Applications of Technologies in Healthcare and Cognitive Assessment II** Chair: Jay Kalra, Canada	HCA
11:40-12:40 (HST) AHFE 1: Makai	A task selection method for Alzheimer's disease patient prediction to reduce patients' burden Soma Furukawa, Masaomi Kimura, Japan Toward robust patient-level Parkinson's Disease classification: Evaluating stability across participant compositions using wearable-sensor and questionnaire information Ruka Hashimoto, Masaomi Kimura, Japan Artificial intelligence-assisted rapid on-site evaluation: A human factors-informed patient safety framework for cytopathology Bryan Johnston, Jawahar (Jay) Kalra, Heather Ruff, Janine Benoit, Canada Health psychology in the digital age: Cyberchondria, health anxiety, and online health information-seeking behaviors Özlem Özden Tunca, Deniz Şarlak, Ayşe Altunkaya Erdoğmuş, Özlem Koç Özden, Özlem Melek Mumcuoğlu, Turkey Cross-layer ethical challenges of federated analytics and learning in multi-institutional health research Maja Nisevic, Gianmaria Silvello, Dusko Milojevic, Belgium The Disclosure Paradox: A human factor framework to medical error disclosure Zoher Rafid-Hamed, Jawahar (Jay) Kalra, Canada	

27	**Human-Centered Design and Design for Inclusion VI** Co-Chairs: Shin Fukuzumi and Hideyuki Nagashio, Japan	HCD
11:40-12:40 (HST) AHFE 2: Maloko	Stakeholder requirements for quality-in-use Shin Fukuzumi, Japan EdgeConv-based spatial difference extraction of plantar pressure improves mediolateral ground reaction force estimation during walking Hideyuki Nagashio, Yusuke Osawa, Kazunori Kaede, Keiichi Watanuki, Japan Incorporating user research findings into a model-based enterprise architecture to protect the ocean Sarah Rudder, Audrey Haque, Amna Greaves, Todd Jackson, Will Harper, Amy Florentino, USA (Virtual) A human-centered, theory-based approach to designing conversational AI for food insecurity support at HBCUs Alaina Smith, Jasmine McKenzie, Mark Holden, Wesley Junkins, Juan Gilbert, USA (Virtual) A user-centred design approach for inclusive and trustworthy human-machine interfaces in AI-based CCAM systems Turkan Hentati, Katerina Touilou, Spain/Greece (Virtual) From generic HMI to driver-adaptive automation: Multimodal feedback, mode awareness and customized takeover timing Turkan Hentati, Rosen Dimov, Oana Moldovan, Spain	

28	**Wearable Technologies, Social and Affective Computing II** Co-Chairs: Elham Morshedzadeh, USA and Akihiro Ogino, Japan	WTSAC
11:40-12:40 (HST) AHFE 3: Mauka	Effects of avatar-mediated helping and gratitude feedback on users' prosocial behavioral intentions Akihiro Ogino, Japan Translating user needs into telemedicine training: A mixed-methods approach to designing an augmented reality system Elham Morshedzadeh, Wallace Santos Lages, Shruti Shukla, Shiva Ghasemi, Andre Muelenaer, USA On the role of cardiovascular health in sleep and their effects on cognitive control Noelle Brown, Ava McVey, Kaylin Strong, Nicholas Armendariz, Rebecca Nesmith, Michael Kukenberger, Joseph Coyne, USA Exploring user affect in virtual reality cultural heritage learning using EEG Maryann Godje, Javier Gonzalez Sanchez, Elizabeth Minor, USA (Virtual)	

29	**Industrial and Systems Engineering Application I** Co-Chairs: Reijo Savola, Finland and Simon Saurbier, Germany	ISE
11:40-12:40 (HST) AHFE 4: Ekahi	A cryptoagility-driven architectural model for post-quantum cryptography migration in edge and access networks Reijo Savola, Finland Comparison of horizontal moment arm measurements for the revised NIOSH lifting equation and the lifting fatigue failure tool Michael Jorgensen, Daniel Chikwendu, Nils Hakansson, Juan Hernandez, Hai Nguyen, USA An institutional federated readiness assessment framework for multidisciplinary research organisations Jayden Khakurel, Pirjo Spuul, Estonia Human-centred transition pathways for AI-enabled safety-critical systems: An industrial systems engineering perspective Dimitrios Ziakkas, Debra Henneberry, UK/USA Detecting silent automation reliability degradation - A signal detection theory analysis Cheng Tan, Liang Ma, China (Virtual) Experimental investigation of damping and mass parameters of an adjustable physical hand-arm model for reproducing human mechanical impedance Simon Saurbier, Johannes Roggenstein, Moritz Engelmann, Lukas Bunk, Dieter Krause, Sven Matthiesen, Germany (Virtual)	

30	**Applications in Training, Learning and Education I** Co-Chairs: Fuhua Lin, Canada and Hui Wang, USA	TLS
11:40-12:40 (HST) AHFE 5: Elua	A controlled comparison of MARL training-execution paradigms for cooperative Multi-UAV fire detection Tanvi Chanchalani, Fuhua Lin, Canada Embodied empathy as pedagogy: A consumer tribe field immersion activity for customer experience professional formation Mariana Alfaro Cendejas, Mexico Classroom project at the IPN: A project-based methodology aimed at success Selene Margarita Vazquez Soto, Jessica Garcia, Xochiquetzalin González Olivier, Mexico A Bloom's taxonomy-based cybersecurity training curriculum for air traffic controllers Hui Wang, USA Teaching human–AI collaboration: A task-based framework for inclusive design education Dan Li, Lei Xia, Mudasir Ahmed, Ling Fan, China (Virtual) How startups communicate their positioning in the EdTech and corporate training market: A topic modeling analysis Manuel Kaiser, Tim Beichter, Germany (Virtual)	

31	**Human-Centered Design and Design for Inclusion VII** Co-Chairs: Shaoping Xiao and Michael Stubblefield, USA	HCD
13:00-14:30 (HST) AHFE 1: Makai	A human-centered framework for AI-wearable integration in automotive assembly lines Xing Yao, Yehong Zhou, Qiheng Peh, Yanhao Tan, Seung Ki Moon, Chun-Hsien Chen, Lam Haw Woei Sean, James Song, Xiaoqing Yu, Singapore Community-centered intelligent reservoir operation for flood mitigation Shaoping Xiao, USA Evaluating the usability and decision support effectiveness of public health dashboards using eye tracking Michael Stubblefield, Mikaya Hamilton, Steven Jiang, USA AI-assisted head-shape design for high-speed trains: Operationalizing emotional intent in a designer-in-the-loop workflow Zhengyang Wang, Ruochen Hu, China (Virtual) Exploring usability and user perception in an immersive robotics learning environment Diogo Silva, Eduardo Santos, Miguel Nunes, Carlos Costa, Alexandre Ferreira, Francisco Silva, Arabela Fabre, Carolina Pimenta, Nuno Sousa, Iara Margolis, Portugal (Virtual)	

32	**Human–Computer Interaction: Cognitive and Workload Factors V (Virtual Session)** Co-Chairs: Yihung Hsu, Taiwan and Stefano Filippi, Italy	HCI
13:00-14:30 (HST) AHFE 2: Maloko	From visual observation to auditory interaction: A human-centered tangible music system based on physical objects Yishan Hu, Liwen Liu, Qihang Yu, Sishuo Liu, Yiqi Wang, China (Virtual) The impact of scarcity-based dark patterns on user performance, perceived darkness, and workload in subscription services Yihung Hsu, Chien-Hsiung Chen, Taiwan (Virtual) A behavioral observation tool for diagnosing human–AI interaction profiles in engineering design education Stefano Filippi, Italy (Virtual) The mediated moon: Semantic mediation between gesture and generative image Shu-Yu Lin, Jiaming Day, Derlor Way, Taiwan (Virtual) A sustainable assistive technology for children with visual impairments Mayra Carrión, David Morales-Martínez, Marco Santórum, Lisbeth Romo, Karen Santórum, Ecuador (Virtual)	

33	**Human-Technology and Future of Work III** Co-Chairs: Dylan Jurski and Di Liu, USA	HTFW
13:00-14:30 (HST) AHFE 3: Mauka	Intra-crew dynamics of multi-unit operations in a nuclear power plant simulator Dylan Jurski, Thomas Ulrich, Ronald Boring, Justin Watson, Emma Hone, USA Assessing embodied-AI humanoid robots for construction: A Task-Capability-Human-Compatibility (TCHC) Framework Di Liu, Mengyu Liu, USA From recommendation correctness to clinical action: Transparency, trust, and verification in AI decision support Simranpaul Dhami, Dennis Vincenz, Kat Moran, Canada (Virtual) Autonomous hospitality yachts: Designing trustworthy human–AI experiences in future maritime environments Laura Pagani, Paolo Gemelli, Alessandro Bertirotti, Mario Ivan Zignego, Italy (Virtual) Beyond the Employer: Solar UV Risk Profiles of Self-Employed Farmers and Artisanal Fishers Rodrigo Dominguez, Maria Paz Caceres, Fanny Mondaca, Sebastian Amaro, Chile	

34	**Applications in Training, Learning and Education II (Virtual Session)** Co-Chairs: Caleb Vatral and Richard Stone, USA	TLS
13:00-14:30 (HST) AHFE 4: Ekahi	System awareness, context awareness, and situational trust in human-AI decision making for military command and control Rune Stensrud, Sigmund Valaker, Norway (Virtual) Measuring what generative AI actually saves in instructor-led training development: A matched-deliverable time-and-quality comparison Richard Stone, Anthony Lavazza, Michael Jenkins, Claire Carter, Lixsa Barraza, Meagan Ault, USA (Virtual) Evaluation of ChatGPT-generated vs. self-created study reviewers: A case study comparing student test scores, efficiency, and cognitive workload Aliyah Maxine P. Mallari, Yngrid Bless Z. Cadena, Aleeza Fiona R. Montinola, Lorelie Grepo-Jalao, Philippines (Virtual) A conceptual framework for modeling team adaptation in cooperative games through Ludic Knowledge Caleb Vatral, USA (Virtual) Sensing the seasons: Exploring preschoolers' seasonal cognition through multisensory interaction Yi Li, Yu Gao, Yanfei Xu, China (Virtual) Terrain orientation test predicts navy flight training outcomes in high and low stakes settings Joseph Coyne, Ciara Sibley, Kaylin Strong, Michael Kukenberger, USA	

35	**Ethical Issues and Considerations in Human Factors** Co-Chairs: Mark Miller and Akram Bayat, USA	EIC
13:00-14:30 (HST) AHFE 5: Elua	Integrating human factors with safety risk management through the Bowtie Analysis: Forming a commercial pilot mental health risk management system Mark Miller, Sam Holley, Aric Raus, USA Trust calibration and surveillance auditing in human-AI co-ideation Akram Bayat, USA How and why did the lack of LCES contribute to fatal outcomes in the June 1990 Dude Fire, July 1994 South Canyon, and June 2013 Yarnell Hill Fire? Fred Schoeffler, USA The impact of human factors on counter-drone systems Serge Chaumette, France	

36	**Applications of Technologies in Healthcare and Cognitive Assessment III** Co-Chairs: Lisa Loloma Froholdt, Denmark and Sejal Shah, USA	HCA
9:00-10:00 (HST) AHFE 1: Makai	Human and psychological factors and seasickness in transitions at sea Lisa Loloma Froholdt, Simone Madsen, Anna Udh Bøge, Denmark Analysis of mechanical loads on the handrail during stair ascent at the initiation and completion phases Runa Narita, Tomoya Hasebe, Daisuke Morioka, Japan AI-assisted augmented reality system for home-based upper-extremity stroke rehabilitation Sejal Shah, Ryan Mohammadian, Elham Morshedzadeh, Amin Alipour, Pei-Fen Chang, USA Speech analysis integration for assistance in identification of potential Alzheimer's disease early symptoms Lili Marlene Camacho Bustamante, Alejandro Díaz Ruiz, Sergio Alberto Navarro Tuch, Mexico Attention to medications and related information during pharmacist verification: An analysis of experts and novices using AI-based gaze classification Yoshitaka Maeda, Kota Miyanishi, Kosuke Oiwa, Yukikazu Murakami, Japan (Virtual) Acceptance and user experience of a serious game for independent home-based rehabilitation in older adults Rosane Sampaio, Alexandre Carrança, Joao Oliveira, Joana Andrade, Emanuel Sousa, Portugal	

37	**Human-Centered Design and Design for Inclusion VIII** Co-Chairs: Nhut Ho, USA and Andrea Sofía Benítez Moreno, Mexico	HCD
9:00-10:00 (HST) AHFE 2: Maloko	Investigation of activity-specific optimal seat configurations for vehicle occupants using an adjustment method with a reconfigurable seat mockup Osamu Takano, Jongseong Gwak, Yuya Nakamoto, Tomo Kaneko, Japan Developing an approach to measure trust in flight testing of autonomous aircraft systems: An LLM-assisted robotic journaling proof of concept Nathalie Ochoa, Martin Ha, Justin Stofik, Rachel Jager, Brenda Haslup, Boyoung Kim, Nhut Ho, USA/South Korea BrailleBridge: A cost-conscious mechatronic prototype for digital text-to-tactile braille conversion Andrea Sofía Benítez Moreno, Sergio Alberto Navarro Tuch, Mexico From heuristics to evidence: A comparative usability evaluation and design implications for space mission planning tools Tia Bajaj, Madhusudan Vijayakumar, Rajeev Ramprasad, USA (Virtual) Digital avatars and intelligent recommendation: Design approach and study of personalized user experience in the textile and clothing sector DIogo Lopes, Isabel Varajão, Nuno Sousa, Yusbel castilla, Yanelys llerena, Pedro Pereira, Pedro Magalhães, Portugal (Virtual)	

38	**Wearable Technologies, Social and Affective Computing III** Co-Chairs: Alexis Cady, USA and Yi Jiang, Japan	WTSAC
9:00-10:00 (HST) AHFE 3: Mauka	Blast and physiological wearables: Hardware testing and VOC analysis Alexis M. Cady, Kelly DiCristina, Robert DeMarco, Lucas Hess, Saniyah L. Bullock, Michael Menegus, Dominic Cheng, Florence B. Chua, Jose J. Rodriguez, USA Headset-type wearable biosensor for transcutaneous monitoring of acetone vapor from the external auditory canal Yi Jiang, Geng Zhang, Kenta Iitani, Yasunari Miyazaki, Kohji Mitsubayashi, Japan Wearable multimodal sensing for pilot stress and fatigue monitoring across real-world flight phases Atandrila Chowdhury, Sudip Vhaduri, Julius Keller, Debra Henneberry, Mark Wilson, USA Fabric-based wearable sensors for multimodal motion and pressure tracking Ganit Goldstein, Amit Schechter, Skylar Tibbits, Dava Newman, USA Evaluating occupational heat stress using wearable physiological monitoring: A field study of environmental and physiological response Brandon King, Jeremy Gouzd, USA (Virtual)	

39	**Industrial and Systems Engineering Application II** Co-Chairs: Sohyung Cho and Sam Zarei, USA	ISE
9:00-10:00 (HST) AHFE 4: Ekahi	Predicting ergonomic risk and worker performance using neural networks with EMG and kinematic data Sohyung Cho, USA A data-driven human factors risk prediction in aviation loss-of-control accidents: A weather-informed machine learning–Bayesian network framework Sam Zarei, Brian Roggow, Kamran Gholamizadeh, Ankit Soni, USA The process of information integration in children's spatial cognition: An analysis of newly acquired knowledge and mapping rates via fieldwork Makoto Oka, Hirohimo Mori, Japan Use case analysis for designing an integrated monitoring center for nuclear power plants Junhyeong Bang, Jonghyun Kim, South Korea Designing an experimental environment for training stakeholder orchestration by the non-expert one-person SIRT in manufacturing SMEs Tomoyuki Kato, Isao Kato, Japan Cyber Resilience Act reporting obligations in vulnerability handling: An IDEF0 analysis Jumpei Tahara, Kenji Watanabe, Japan (Virtual)	

40	**Augmented, Virtual and Mixed Reality Simulation I** Co-Chairs: Vanessa Fehlig, Germany and Thomas Schnieders, USA	AVM
9:00-10:00 (HST) AHFE 5: Elua	Acceptance of virtual reality among older adults: An exploratory study of a culturally embedded VR application Caroline Schon, Vanessa Fehlig, Rong Huang, Tim Wachsmuth, Germany Evaluating nasal fit interfaces in XR headsets using anthropometric clustering techniques Thomas Schnieders, Karen Bredenkamp, Paul Foster, Brian Heckman, USA Digital personas in immersive learning: How avatar-mediated interaction shapes competency development in higher education: A systematic review Safa Omri, Florian Urmetzer, Jens Neuhüttler, Germany/UK How AR guidance shapes behavioral change in walking: A stage-based analysis of gaze and trajectories Shugo Matsui, Tatsuya Shibata, Japan Rethinking Online Collaboration through Metaverse Learning Environments Marie-Luce Bourguet, United Kingdom	

41	**Human-Centered Design and Design for Inclusion IX** Co-Chairs: Josef Pavlicek, Czech Republic and Mosa Ramohlokoane, South Africa	HCD
10:20-11:20 (HST) AHFE 1: Makai	From human narrative to harmonic structure: A human-centered investigation of algorithmic music generation through the chord wheel diagram Josef Pavlicek, Petra Pavlickova, Irena Štrausová, Czech Republic Constructing a best-fit measurement scale for evaluating IEQ, productivity, and wellbeing for individual attributes of employee workspaces Mosa Ramohlokoane, Bankole Awuzie, Thabelo Ramantswana, South Africa From individual songs to music corpora: Evaluating explainable harmonic decision-making on HookTheory Josef Pavlicek, Martin Pelikán, Czech Republic AHP-based cultural gene extraction and AIGC-assisted immersive museum experience design for Chenghai lantern riddles Yi Han Dong, Xin Xie, China (Virtual) Cabin layout optimization of underwater transport vehicles based on personnel physiological and cognitive state maintenance Si Li, Zhanshuo Zhang, Xiaoyi Zhou, Ziang Chen, Di Yao, Hongyu Wang, Kaili Yin, Tiancheng Huang, China (Virtual)	

42	**Human–Computer Interaction: Cognitive and Workload Factors VI** Co-Chairs: Daniel Jensen, USA and Olivia Hosie, Australia	HCI
10:20-11:20 (HST) AHFE 2: Maloko	Design innovation of a remotely-controllable portable door lock for physical security John McIntire, Matt Srnoyachki, Jason Sopko, Adam Adducchio, USA Comparison of threshold-based and continuous measurement methods for assessing wrist and finger posture during hand-controller interaction Olivia Hosie, Mats Isaksson, John McCormick, Oren Tirosh, Chrys Hensman, Australia Purported and measured waveform characteristics of vagus nerve stimulation devices Lindsey McIntire, John McIntire, Ben Mandani, Gideon Farhadian, Jackson Tell, Kassandra Guinto, Lukas Goodworth, Will Allison, Daniel Jensen, USA Effects of customer-side environmental noise on interactions in Avatar-mediated remote customer service Manabu Chikai, Kentaro Watanabe, Bach Quang Ho, Jooho Park, Yui Murakami, Kayo Koike, Min Ma, Masahiro Tsutsu, Japan A design methodology for explainable supervisory interfaces supporting situation awareness and human-AI collaboration in augmented SOCs Kahina Amokrane, Reda Yaich, Emeline Durimel, Guillaume Giraud, Christelle Fouquiau, France (Virtual) The invisible footprint: Awareness, attitudes, and designable solutions for sustainable human-AI interaction Jasmine McKenzie, Mark Holden, Wesley Junkins, Alaina Smith, Juan Gilbert, USA (Virtual)	

43	**Computation and Intelligent Design II** Co-Chairs: Bradley Killen and Jeremy Ludwig, USA	CID
10:20-11:20 (HST) AHFE 3: Mauka	An intelligent scheduling capability for ISR collection assignment Jeremy Ludwig, Annaka Kalton, Forest Finnigan, Katelyn Clements, Jerred Holt, USA Behavior-aware arbitration for scalable robot swarms in cooperative search-and-retrieval tasks Bradley Killen, Daniel Carruth, Cindy Bethel, Kenna Henkel, Victor Paul, USA A high-availability multi-agent RAG architecture for automated expert assistance and multimodal technical onboarding Javier Izquierdo-Reyes, Miguel de Jesús Ramírez-Cadena, Olivia Calderón-Valderrama, Mexico Cardiac and sleep-stage responses to rhythmic auditory and amplitude-modulated vibrotactile pillow stimulation during daytime naps Kazutaka Yamamoto, Keiichi Obara, Chinami Taki, Kohei Kishimoto, Shima Okada, Japan Unsupervised clustering of repetitive task trials via Tucker decomposition of joint-angle data tensors Akisue Kuramoto, Masaya Noguchi, Kosuke Goshima, Daiki Koga, Kazuki Hiranai, Motomu Nakashima, Japan A multitask evolutionary framework for procedural content generation in games Hoang Long Nguyen, Taneli Nyyssönen, Finland (Virtual)	

44	**Advances in Transportation II** Co-Chairs: Jiahui Qian, UK and Maria Rosaria De Blasiis, Italy	TRANS
10:20-11:20 (HST) AHFE 4: Ekahi	Experiencing autonomy: Passenger perceptions of self-driving shuttles across diverse user groups Jiahui Qian, Guilhermina Torrao, Joshua D'Souza, Joseph Mundy, Anna Mizen, Jisun Kim, UK A real-time identification method of pilot's stress state based on ECG features Hua Zhao, Ran Peng, China Global assessment of influences and motivators for driver diversionary route selection Brian Wolshon, David Fuller, USA Analysis of driver risk perception at intersections across various road contexts: A driving simulator study Maria Rosaria De Blasiis, Italy Human driver temperament and the safety impact of a c-V2X denial-of-service flooding attack in mixed-autonomy traffic Rasheed Bello, Varghese Vaidyan, Gurcan Comert, Vijay Bendigeri, Akinbobola Jegede, Judith Mwakalonge, USA Continued assessment of the shortened attention control tasks: Impact of practice effects, an interfering pre-cue, and speed-accuracy manipulation Christopher Draheim, Ciara Sibley, Kaylin Strong, Michael Kukenberger, Joseph Coyne, USA	

46	**Artificial Intelligence and Social Computing II** Co-Chairs: Yi Pei Wu, Taiwan and Dalit Levy, Israel	AISC
11:40-12:40 (HST) AHFE 1: Makai	Designing with and beyond humans: An LLM-based human–AI co-creation framework for remote curatorial collaboration Yi Pei Wu, Chien-Hsu Chen, Taiwan "Listen, who is anxious?": A multi-agent coordination and self-dialogue mechanism based on internal family systems theory Ni Jin Li, Rung-Huei Liang, Taiwan Catachresis in the classroom: How anthropomorphic language shapes the discourse of AI in education Dalit Levy, Israel Qualifying NEV user experience: LLM-based dimensional encoding and hierarchical clustering of online comments Siyun Zhang, Hong Kong SAR China (Virtual) Consistency of AI-driven usability evaluations for software: Learning management systems as an example Victor K. Y. Chan, Macau SAR China (Virtual) Human-AI collaboration in digital twin-enabled supply chains: A framework for resilient decision-making under disruption Md Asfaqur Rahman, Shakila Azad, Numair Bin Sharif, Md Hasibur Rahman Murad, Razia Sultana, Mohammed Tanjim Uddin Chowdhury, Md Shahadat Hossain, USA/China	

47	**Human-Centered Design and Design for Inclusion X** Chair: Togo Hane, Japan	HCD
11:40-12:40 (HST) AHFE 2: Maloko	Living geometry as a human-centered design framework for context-aware multi-stage injury prevention Togo Hane, Yuya Kawabe, Philip Blenwall, Koji Kitamura, Mikiko Oono, Tatsuhiro Yamanaka, Yoshifumi Nishida, Japan From “disgust” to acceptance: A participatory design study of insect-based foods based on cognitive friction Yuzhu Liu, Shuai Sun, China (Virtual) A human-centered multi-node multimodal design framework for interactive installations in cultural heritage sites: A case study of Qingcheng mountain Weizhen Xiao, China (Virtual) Behavior-changing design: A systems design approach to sustainability in cosmetic consumption Eubin Tak, Min Kang, USA (Virtual) Exploring Multisensory Interaction in Fibre Art: Implications for Design Strategies Heyao Li, Zuojun Yu, China	

48	**Human–Computer Interaction: Cognitive and Workload Factors VII** Co-Chairs: Mohammad Mahdi Nazari, USA and Marco Santórum, Ecuador	HCI
11:40-12:40 (HST) AHFE 3: Mauka	Sustainability-driven assistive technology: A LEGO prototype for enhancing safe navigation Marco Santórum, David Morales-Martínez, Mayra Carrión, Daniel Carvajal, Juan Benavides, Ecuador Effects of virtual agent style and decision control on psychological agency and trust in AI-enabled telecare Che Liang-Yuan, Chien-Hsiung Chen, Taiwan (Virtual) Appropriate reliance in wearable AI for Parkinson’s differential assessment: Calibration, selective referral, and subgroup reliability Mohammad Mahdi Nazari, Negar Heidari Matin, Yaser Michael Banad, USA (Virtual) Prompts to impact: User experience design in AI-enhanced online learning environments Julian Galindo-losada, Vilma Rodríguez, Viviana Parraga, Mayra Carrión, Marco Santórum, Ecuador (Virtual) Bridging Cognitive Systems Engineering and Product Discovery: An Integrated Framework Combining Work Domain and Jobs-to-Be-Done Analyses Amanda Warren, Sam Mahoney, United States	

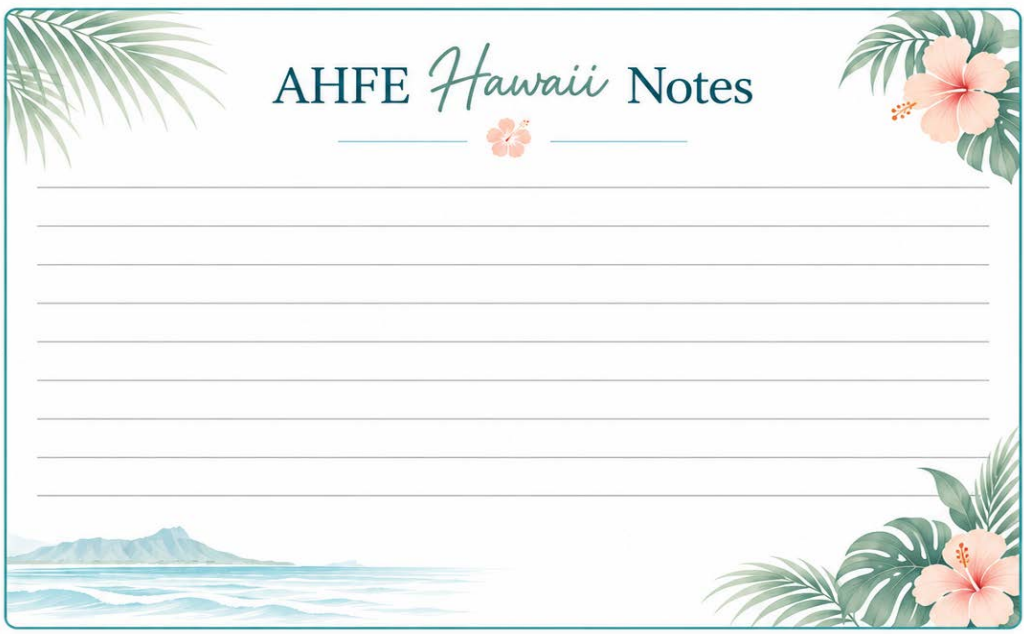
49	**Augmented, Virtual and Mixed Reality Simulation II** Co-Chairs: Stephen Walenchok and Yibo Qiang, USA	AVM
11:40-12:40 (HST) AHFE 4: Ekahi	Development, comprehension testing, and preliminary evaluation of child-adapted measures of visually induced motion sickness for virtual reality Nichole Breeland, Stephen Walenchok, Rachel Kelly, USA Do close-range drone operations affect workers' emotional states and stress levels? A mixed-reality study Yibo Qiang, Sébastien Hélie, Jeffrey M. Haddad, Sogand Hasanzadeh, Behzad Esmaeili, USA (Virtual) Detection-aware generation of fatigue-conditioned ocular and head behaviors for virtual drivers Woojin Kim, Seung-Jun Lee, Yonghyun Kim, Myeongkyu Lee, Brandon J. Pitts, South Korea (Virtual) Improving accessible mobility for visually impaired travelers: An IPA analysis of the sightseeing verbal map in Shanghai Tianyu Li, Takashi Uchida, Japan (Virtual)	

51	**Applications of Technologies in Healthcare and Cognitive Assessment IV** Co-Chairs: Amey Gohil and Alyssa Weakley, USA	HCA
13:00-14:30 (HST) AHFE 1: Makai	A distributed local LLM and centrally governed RAG architecture for privacy-preserving cancer registry support Mitsuhiro Takasaki, Kazumi Sasaki, Narue Nakabayashi, Megumi Hori, Tomohiro Matsuda, Japan Perceived walking duration across street-tree spatial patterns: Toward a route recommendation system Kenta Namiki, Yuichiro Kinoshita, Japan Streamlining remote care: Computer access solutions for older adults with cognitive impairment Priyanka Koppolu, Amey Gohil, Tejas Patil, Preyash Yadav, Michelle Cohn, Chen-Nee Chuah, Shijia Pan, Sarah Tomaszewski Farias, Alyssa Weakley, USA Embedding self-administered dementia monitoring into a remote caregiving platform: A pilot usability and data-sharing preferences study Amey Gohil, David Bissig, Hao-Chuan Wang, Priyanka Koppolu, Tejas Patil, Preyash Yadav, Shreyas Asawar, Shijia Pan, Michelle Cohn, Chen-Nee Chuah, Sarah Tomaszewski Farias, Alyssa Weakley, USA Evaluating integrated multimedia communication designed for cognitive accessibility within a remote caregiving platform Tejas Patil, Priyanka Koppolu, Amey Gohil, Preyash Yadav, Chen-Nee Chuah, Shreyas Asawar, Sarah Tomaszewski Farias, Alyssa Weakley, USA Designing clinical research participation as a sociotechnical system: The trio human-centered design studio method Santosh Basapur, Raj Shah, USA	

52	**Human-Centered Design and Design for Inclusion XI** Co-Chairs: Francis Logah, USA and Tian Wang, China	HCD
13:00-14:30 (HST) AHFE 2: Maloko	The impact of visual UI elements on information comprehension in websites Koki Takashima, Lei Luo, Shuhei Wada, Masato Takanokura, Japan Differential sensitivity of EEG, ECG, respiration, and GSR to mental states classification: A comparative machine-learning analysis Francis Logah, Younho Seong, USA Evidence-informed modular design for restorative campus open spaces: A case study at Harbin Institute of Technology Tian Wang, Yuning Jiang, Jingyi Mu, Yuanhong Ma , China When more becomes too much: Cognitive support and interpretive constraint in generative-AI-assisted reading of Chinese classical poetry Rui Peng, Yuankai Lin, China (Virtual) Interpreting user narratives in CAD: A graph-based approach Emil Ballegaard, Masashi Kajita, Isak Worre Foged, Kirsten Marie Raahauge, Jens Jørgensen, Denmark (Virtual)	

53	**Industrial and Systems Engineering Application III** Co-Chairs: Akio Tsuchiuchi, Japan and Valuthottiyil Shajahan, India	ISE
13:00-14:30 (HST) AHFE 3: Mauka	A cross-functional value engineering approach to transforming existing factories into advanced factories Akio Tsuchiuchi, Kengo Takezawa, Ryosuke Takahashi, Shinji Amano, Takashi Kido, Japan A real-time edge-based multimodal safety assistance system for forklift operations Thasnimol Valuthottiyil Shajahan, Babji Srinivasan, Rajagopalan Srinivasan, India Acoustic latency and timekeeping in large co-located ensembles: A human factors analysis of marching band coordination Sean Ge, USA (Virtual) End-to-end MBSE framework for lifecycle traceability, digital engineering, and system-of-interest realization Joshua Adelabu, Bhushan Lohar, John T Wade, Sean Walker, Carlos Montalvo, USA (Virtual) A structured migration framework for brownfield digital transformation in manufacturing systems Haris Karic, Arockia Selvakumar, Daniel Schilberg, Germany (Virtual) Development of a multilingual maritime safety culture survey interface with AI-driven adaptive interview system Taufiqur Rahaman, USA	

54	**Applications in Training, Learning and Education III** Co-Chairs: Steven Doehler and Ayla Santos, USA	TLS
13:00-14:30 (HST) AHFE 4: Ekahi	Detection without speed isn't defense: Human-AI coordination against cognitive cyberattackers Ayla Santos, Stephan Carney, Rob Groome, Nikolos Gurney, USA The vigilance decrement in the wild: How to study and design for long-term process monitoring Kelly Dickerson, Courtney Thomas, Ronald Boring, USA Openin x: A dual-path wearable auditory interface for divided-attention support in unilateral conductive hearing loss Yutong Cai, Lei Xia, China I've got an idea: A study on the decision to share Steven Doehler, USA Continuous competency assurance through human-AI teaming: Reimagining instructor development Debra Henneberry, Dimitrios Ziakkas, Konstantinos Pechlivanis, USA/UK Transformative didactic strategy for strengthening meaningful learning Enrique Aarón García Vázquez, Miguel Angel Cruz Domínguez Hernández, Xochiquetzalin González Olivier, Mexico	



Interactive Poster Demonstrations

Room: Mauka Foyer • Virtual Room: AHFE Posters
Tuesday, December 1, 2026 — 10:00-14:00 (HST)

ID	Poster / Demonstration Title and Authors
A1	Does being #OpenToWork hurt or help? How platform-specific signals on LinkedIn shape hiring manager perceptions and selection outcomes Pamela Gu, USA
A2	Effects of hemoglobin-induced facial redness on anger recognition in Japanese and Thai observers Yuanyuan He, Yoko Mizokami, Tomoharu Ishikawa, Japan
A3	A better understanding of vibrations: First insights on the influence of vibratory stimuli on postural adjustments in the sitting posture context Salim Zenasni, Tanguy Marqueste, Richard Kronland-Martinet, Solvi Ystad, Mitsuko Aramaki, Erick Dousset, France
A4	Unraveling the process of consummatory engagement to enable fulfilling personal experiences Sayaka Noda, Toshihisa Doi, Japan
A5	UX research for designing plastic household products - perspectives of time efficiency, mindful living, and environmental awareness Luo Weiyang, Toshihisa Doi, Sayaka Noda, Kuroda Toshiki, Sayaka Yamane, Masahiro Kuwa, Shun Ando, Japan
A6	An exploratory study of weekly satisfaction tracking for long-term UX evaluation Toshihisa Doi, Japan
A7	Virtual reality for postoperative pain management: Current applications and future directions Tugba Yavuz, Eva Kubrova, Christy Hunt, Fiorela Martinez, Bilge Findik, Melike Jane Ekren, USA
A8	Mitigating risks in the use of medical devices in the home setting/environment Regan Lawson, Kevin Ong, Sangeeta Abraham, USA
A9	Four-port MIMO antenna operating in the 3G to 6G and Wi-Fi bands Marian Wnuk, Poland
A10	A human-centered wearable platform for physiological monitoring and real-time biofeedback in integrative PTSD rehabilitation Jacopo De Araujo, Jakob Bardram, Denmark
A11	Personal protective equipment use and occupational health risks among farmers in Trinidad and Tobago: Preliminary findings from an agricultural safety study Barry Parasram, Avishek Choudhury, Trinidad and Tobago
A12	UX challenges for conceptualizing interfaces on smart glasses with displays Alef Santos, Najara Paixao, Marcos Silbermann, Brazil
A13	The role of mental models in learning how to use smart glasses with display among first time users Alan Turatti, Hanah Correa, Marcos Silbermann, Rodrigo Cavalcanti, Randerson Queiroz, Brazil
A14	Architecture and early software validation for smart glasses: A lean based approach Kinderman Barros, Aecio Jorge Macedo Braga, Marcos Silbermann, Randerson Queiroz, Brazil (Virtual)
A15	Adjudicating the imperceptible: Human review of concealed-content detections in AI document ingestion Richard Stone, Michael Jenkins, Banyan Foust, Abagail Miller, Alexa Ramos, USA
A16	Leadership in nursing management: Building high reliability organizations Motoki Mizuno, Takumi Iwaasa, Yasuyuki Hochi, Kentaro Inaba, Emiko Togashi, Yumi Arai, Naoto Shoji, Makoto Sugawara, Ikuko Tojima, Yuki Mizuno, Japan
A17	Estimating energy expenditure across sleep stages and nights using heart rate and body movement Kidai Oyama, Kazutaka Yamamoto, Keiichi Obara, Kohei Kishimoto, Chinami Taki, Shima Okada, Japan
A18	Association between cardiac autonomic responses and learning frequency in App-based language learning Keisuke Jo, Hidenori Ishikawa, Kohei Kishimoto, Chinami Taki, Shima Okada, Japan
A19	Empirical Bayes (EB) Method for developing vulnerable road users crash modification factors at roundabouts Miriam Mkufya, Arthur Mukwaya, Nancy Kasamala, Judith Mwakalonge, USA

Interactive Poster Demonstrations

Room: Mauka Foyer • Virtual Room: AHFE Posters
Wednesday, December 2, 2026 — 10:00-14:00 (HST)

ID	Poster / Demonstration Title and Authors
B1	Predicting workplace conflict through multimodal AI-based behavioral analysis: An ethical and cognitive framework Damina Townes, Rushabh Gandhi, Apoorv Singh, Azhar Mohammed Abdul Haleem, Youngsoo Shin, USA
B2	Flying while coordinating: A work domain analysis of goggles-only FPV pilots as nodes in a scalable strike element Michael Jenkins, USA
B3	Development and evaluation of applications for oral and cognitive rehabilitation: A facial rock–paper–scissors program with psychological effects Kiyomi Yoshioka, Japan
B4	Development of a game application using texture-related onomatopoeia with a focus on declined texture recognition in dementia Shunsuke Miyauchi, Masaki Sakanaka, Yuji Nozaki, Madoka Nakajima, Chihiro Kamohara, Chiyoko Kameue, Koichi Hirota, Koichiro Iwami, Maki Sakamoto, Japan
B5	E Contextibus Unum: When should your AI share your information with others? Enya Bullard, Xiang Chen, USA
B6	A lifelog system for automatically linking physical operations and measurement data in hardware debugging Kairi Miyazaki, Masato Yazawa, Yutaro Takeuchi, Norihisa Segawa, Japan
B7	The immersive power of binaural sound: Reproducing the experience of a music festival Coralie Bureau, Jeanne Nicole, Cindy Chamberland, Alysun Paradis, Calypso Cases, Sébastien Tremblay, Canada
B8	Do after-action reviews improve performance without direct experience? An experimental study in aeronautical simulation Paola Melani, Émilien Perrot, Anne-lise Marchand, France
B9	From uncertainty to confidence: Emotional UX and cross-cultural co-design in campus wayfinding YoungAe Kim, Ikjoon Chang, USA
B10	Comparative evaluation of double DQN and a sequential DQN–PPO hybrid for aerodynamic mesh coarsening in computational fluid dynamics Soowan Lim, Kecheng Long, Sombath Choun, Kensei Narahara, South Korea
B11	Eye-tracking factors during spatial ability task predict IRT-based item difficulty and naval flight training performance Alejandro Albizu, Laura K. Jamison, Kaylin D. Strong, Kayla M. Russell, Ciara M. Sibley, Shannon P. McGarry, Noelle L. Brown, Christopher D. Draheim, Cyrus K. Foroughi, Rebecca L. NeSmith, Sarah R. Melick, Joseph T. Coyne, USA
B12	Measuring mental workload in immersive fighter-flight simulation: A multimodal approach Jean-Christophe Hurault, Marianne Jarry, Gregory Froger, Anne-lise Marchand, Colin Blättler, France (Virtual)
B13	Zili Patrol Robot: A human–robot collaborative inspection system for sub-canopy orchards Jianan Li, China (Virtual)
B14	Focus Pup: A design study on a companion robot for self-management among adults with ADHD Zilin Xiong, Sidi Yang, China (Virtual)
B15	Visual quality, perceived safety, and spatial vitality in Shichahai, Beijing: a day–night assessment of a cultural waterfront Jingjing Ma, Wu Yuwei, Huang Yan, China
B16	Psychological well-being and work performance among nurses at a university hospital in Japan Yasuyuki Hochi, Takumi Iwaasa, Yuki Mizuno, Kentaro Inaba, Emiko Togashi, Yumi Arai, Naoto Shoji, Makoto Sugawara, Ikuko Tojima, Motoki Mizuno, Japan
B17	Training load, nocturnal heart rate, and next-morning vigilance: Implications for athlete's conditioning Keiichi Obara, Naruhiro Shiozawa, Kohei Kishimoto, Chinami Taki, Shima Okada, Japan
B18	Age-related differences in grip strength, finger force, and force control accuracy in healthy adults aged 20–70s: A K-Force dynamometer study Dae Min Kim, South Korea

Interactive Poster Demonstrations

Room: Mauka Foyer • Virtual Room: AHFE Posters
Thursday, December 3, 2026 — 10:00-14:00 (HST)

ID	Poster / Demonstration Title and Authors
C1	Radiological incident awareness and preparedness among the public and first responders: A systematic review Anna Kucharski, Avishek Choudhury, USA
C2	Exploring spatial and psychological factors associated with creativity in office workers Chika Nakatani, Toshihisa Doi, Shushi Doi, Rion Saijyo, Shiori Miyao, Shun-ya Shimizu, Takayuki Kitakata, Japan
C3	Exploring experiential value categories for product use through a sentence completion test: Toward an experiential value scale Toshihisa Doi, Japan
C4	Interactive mattress balancing body pressure distribution and maintaining sleeping posture: Optimized control of variable spring constant Jun Ito, Shin Usuki, Japan
C5	Evaluation of transcranial direct current stimulation on the prefrontal cortex for sustained cognitive performance Krystina Diaz, Tiffany Lui, Riley McNaboe, Sylvia Guillory, Jeffrey Bolkhovsky, Hugo Posada-Quintero, Ki Chon, USA
C6	Threshold-based key management across heterogeneous multi-cloud key management systems Musa Adamou, Ivan Nkwawir, Amir Schur, USA
C7	Development of an AI based PHM system for instrumentation and control (I&C) systems of Korea's APR1400 NPPs Chang Hwoi Kim, Sangjun Park, South Korea
C8	Assessing organisational capability for meaningful human oversight of AI-supported work: A human factors framework Ayoola Rilwan Lawal, Romāns Putāns, Latvia
C9	Emerging technologies and AI in aviation: Reshaping the roles and responsibilities of human factors Yuwei He, Kris Borgen, USA
C10	Designing for the brain: The EPA framework for translating cognitive evidence into design decisions Diana Lodi, USA (Virtual)
C11	From supervision to self-correction: TuneTrace, a persistent visual intonation companion for practice autonomy in autistic young musicians Lujing Yang, China (Virtual)
C12	Wilderness Vanguard: Design and implementation of a quadruped-robot-based proactive terrain verification system for mitigating visual-deception risks in outdoor hiking Haozhe Ma, China (Virtual)
C13	A human–AI collaborative mechanism for commercial packaging design with generative AI Zibin Liu, China (Virtual)
C14	Human-centered design of a multi-modal safety interface for RTK-GPS-based coastal harvesting mobility Kwangtae Jung, Yejin Lee, South Korea
C15	Korea Occupational Safety and Health Agency (KOSHA) Musculoskeletal disorders Prevention Program Ha-eun Lee, Hyun-woo Lee, Sang-mi Uh, Hye-yeong Byun, South Korea
C16	When the model card is the hazard: A silent preprocessing failure in a CT foundation model and a label-free check for trustworthy deployment Woo Hyun Shim, Chae Ri Park, Sang Cheol Kim, Sukyoung An, South Korea
C17	Effects of using VR and tablet rehabilitation applications on standing balance: Center of pressure in patients with cerebrovascular disorders Yuki Mizuno, Shino Izutsu, Mayumi Nishikubo, Yasuhiro Hoshikawa, Japan
C18	Do drivers see e-Scooters the way they see bicyclists? A commercial-vehicle simulator study of detection, gaze, and physiological response Martin Byaruhanga, Angel Lucian , Judith Mwakalonge, Anthony Dontoh, USA

AHFE *Hawaii* Notes

Conference Layout

Registration Desk and Conference Technical Program:
Location: Hyatt Regency Waikiki – Mauka Foyer
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Regency Ballroom Complex
2nd FLOOR ROOMS

AHFE 1: MAKAI
AHFE 2: MALOKO
AHFE 3: MAUKA

Registration Desk

Poster Session
Coffee Breaks

FLOOR PLAN
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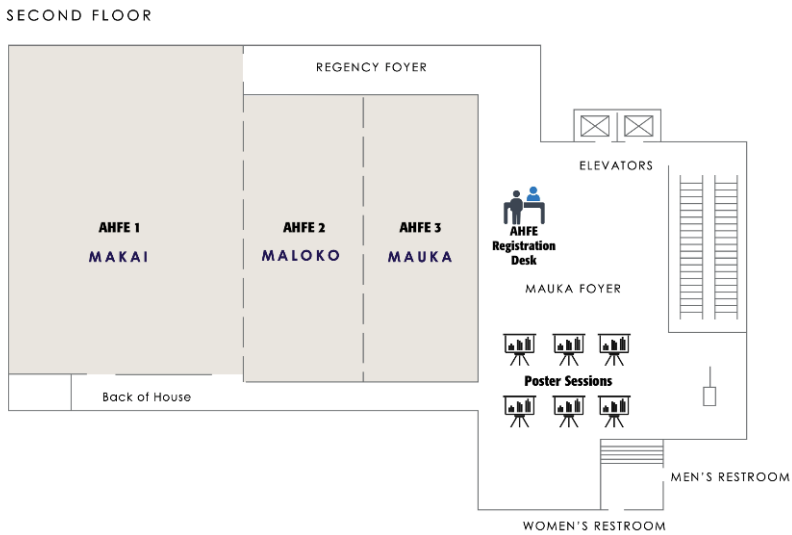
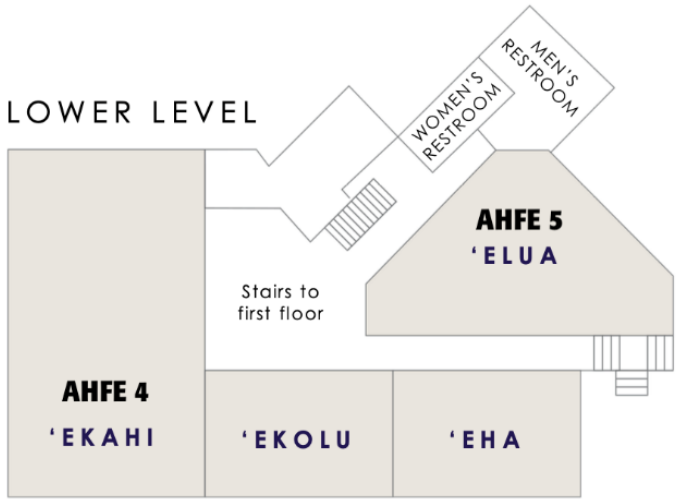


Diamond Head Lower Level

AHFE 4: EKAHI
AHFE 5: ELUA

FLOOR PLAN
DIAMOND HEAD MEETING ROOMS



Opening Session and Keynote Address: Tuesday, December 1, 2026 · 9:00–9:40 (HST).
Conference Reception: 18:00-20:00 (HST), Tuesday December 1, 2026.

Location: NĀLE'A Terrace (3rd Floor, Ocean Front, Diamond Head), Hyatt Regency Waikiki
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December 1-3, 2026

CONFERENCE ORGANIZATION:
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Conference Tracks

Track	Acronym
Application of Emerging Technologies	AET
Artificial Intelligence and Social Computing	AISC
Affective and Pleasurable Design	APD
Augmented, Virtual and Mixed Reality	AVM
Computation and Intelligent Design	CID
Ethical Issues and Considerations in Human Factors	EIC
Emerging Technologies and Business Applications	ETBA
General Papers	GEN
Healthcare and Cognitive Assessment	HCA
Human-Centered Design and Design for Inclusion	HCD
Human-Computer Interaction	HCI
Human-Technology and the Future of Work	HTFW
Industrial and Systems Engineering Applications	ISE
Training, Learning and Education	TLS
Applications in Transportation Research	TRANS
Wearable Technologies, Social and Affective Computing	WTSAC

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(AHFE 2027 Hawaii Edition)

December 10-12, 2027

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