

FES

SEP 9 - 13, 2024 | PHOENIX, ARIZONA



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Individual Differences James Szalma

Internet

Andrea Johnson

Macroergonomics Hanna Barton

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Thomas Rowell

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Surface Transportation
Brandon Pitts

Sustainability

Andrew Thatcher

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Training **Megan Morris** Usability and System Evaluation

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Michael Kuzel 4M Consulting Group, LLC

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Anders Orn Research Collective

Alexandra Wolff The Boeing Company

Xiaoyun Yin Arizona State University

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Engineering for Democracy Institute





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HOTEL FLOORPLAN

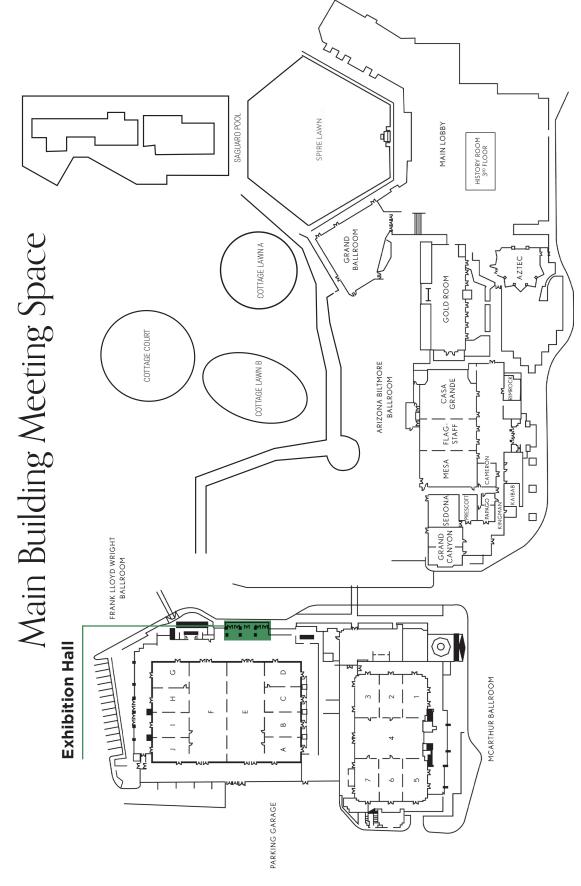


EXHIBIT HALL

Thank you to our exhibitors for their support of ASPIRE 2024



















RESEARCHCOLLECTIVE







JOB FAIR



Applied Cognitive Sciences











SCHEDULE AT A GLANCE

Sunday, September 8

3:00-6:00 p.m. Registration/HFES Info Desk Open

Monday, September 9

7:00 a.m.-7:30 p.m. Registration/HFES Info Desk Open

8:30 a.m.-12:00 p.m. Half-Day AM Workshops

9:00 a.m.-4:30 p.m. Full-Day Workshops

9:00 a.m.-5:00 p.m. Student Career and Professional Development Day

10:45-11:15 a.m. Coffee Break

10:30 a.m.-5:00 p.m. Doctoral Colloquium

1:00-4:00 p.m. HFES Science Policy Fellows

1:30-3:30 p.m. Chapanis Award

1:30–5:00 p.m. Half-day PM Workshops

2:30-3:00 p.m. Coffee Break

3:30-5:00 p.m. Council of Technical Groups Meeting

5:15-6:00 p.m. First Time Attendee Meeting

6:00-8:00 p.m. National Ergonomics Month Expo

6:00-8:00 p.m. Opening Reception

Tuesday, September 10

7:00 a.m.-6:00 p.m. Registration/HFES Info Desk Open

7:00–8:15 a.m. Outreach Division Meeting

7:00 a.m.-8:00 p.m. Birds of a Feather 7:30-8:00 a.m. Coffee Break

8:00-9:30 a.m. Opening Plenary Session

8:00 a.m.-7:00 p.m. Student Lounge Open

9:45–10:45 a.m. Concurrent Sessions

10:00 a.m.-5:00 p.m. Job Fair Open

10:30–5:30 p.m. Exhibits Open

10:45-11:15 a.m. Coffee Break

10:45-11:15 a.m. Collaborative Solutions Showcase

10:50-11:07 a.m. Lightning Lesson

11:15 a.m.-12:15 p.m. Concurrent Sessions

12:15–1:30 p.m. Mentor-Mentee Luncheon (off-site)

12:15-1:30 p.m. Local Chapter President's Lunch

1:30–2:30 p.m. Concurrent Sessions

2:30–3:00 p.m. Coffee Break

2:30–3:00 p.m. Collaborative Solutions Showcase

2:35-4:12 p.m. Lightning Lessons

3:00–5:15 p.m. Concurrent Sessions

5:30-6:15 p.m. OE TG Business Meeting

6:00-8:00 p.m. BCPE/FPE/HFES Practitioners Reception 6:30-7:00 p.m. Korean-HFES Affinity Group Meeting

6:30-7:30 p.m. Student Reception

7:00-9:00 p.m. PD/HC TG Networking Reception (Off-site)

7:30–8:00 p.m. HFES Annual Business Meeting

Wednesday, September 11

7:00 a.m.-8:00 p.m. Birds of a Feather

7:00 a.m.–8:00 p.m. Scientific Publications Committee Meeting

7:30 a.m.-5:30 p.m. Registration/HFES Info Desk Open

8:00 a.m.-7:00 p.m. Student Lounge Open

10:00 a.m.-5:00 p.m. Job Fair

10:30 a.m.-4:15 p.m. Exhibits Open

10:45–11:15 a.m. Coffee Break

10:45-11:15 a.m. Collaborative Solutions Showcase

10:50-11:07 a.m. Lightning Lessons

11:15 a.m.-12:15 p.m. Concurrent Sessions

12:15-1:30 p.m. Ergonomics in Design Editorial Board Luncheon

12:15-1:30 p.m. Human Factors Editorial Board Luncheon

12:15–1:30 p.m. Mentor-Mentee Luncheon (Off-site)

12:15-1:30 p.m. U.S. TAG to ISO/TC 159 Meeting

12:15–1:30 p.m. Extended Reality TG Meeting

12:15–1:30 p.m. BIPOC Affinity Group Lunch 12:15-1:30 p.m. Student Chapter Presidents Lunch

1:30–2:30 p.m. Concurrent Sessions

2:15–1:30 p.m. HF Editorial Board Lunch

2:15–3:00 p.m. Korean-HFES Affinity Group Mentor-Mentee Meeting

2:30–3:00 p.m. Refreshment Break

2:30-3:00 p.m. Collaborative Solutions Showcase

2:35-2:52 p.m. Lightning Lessons

3:00-4:00 p.m. Concurrent Sessions

4:15-5:15 p.m. Fellows Posters Session

4:15-5:15 p.m. Concurrent Sessions

5:15-6:00 p.m. First Time Attendee Meeting

5:30–6:30 p.m. Poster Sessions I

6:30-7:30 p.m. HC TG Business Meeting

Thursday, September 12

7:00 a.m.-8:00 p.m. Birds of a Feather

7:30-8:00 a.m. **Coffee Break**

7:30-8:15 a.m. Technical Program Chairs Meeting

7:30 a.m.-5:00 p.m. Registration/HFES Info Desk Open

8:00 a.m.-7:00 p.m. Student Lounge Open

8:30–9:30 a.m. Concurrent Sessions 9:45–10:45 a.m. Concurrent Sessions

10:00 a.m.-5:00 p.m. Job Fair

10:30 a.m.-4:15 p.m. Exhibits Open

10:45–11:15 a.m. Coffee Break

10:45-11:15 a.m. Collaborative Solutions Showcase

10:50-10:57 a.m. Lightning Lessons

11:15 a.m.-12:15 p.m. Concurrent Sessions

12:15-1:30 p.m. Journal of Cognitive Engineering and Decision Making Editorial Board Luncheon

12:15–1:30 p.m. Mentor-Mentee Luncheon (Off-site)

1:30-2:30 p.m. Concurrent Sessions

2:30–3:00 p.m. Coffee Break

2:30–3:00 p.m. Collaborative Solutions Showcase

2:35-4:12 p.m. Lightning Lessons 3:00-4:00 p.m. Concurrent Sessions

4:15–5:15 p.m. Concurrent Sessions

5:30–6:30 p.m. Poster Session II

Friday, September 13

7:00-8:00 a.m. Scientific Publications Committee Meeting

8:00 a.m.-12:00 p.m. Registration/HFES Info Desk Open

8:00 a.m.-12:00 p.m. Birds of a Feather

8:00 a.m.-12:00 p.m. Student Lounge

8:30–9:30 a.m. Concurrent Sessions

8:30-10:45 a.m. Human Factors Extended Reality Showcase

9:35–9:42 a.m. Lightning Lesson

9:45–10:45 a.m. Concurrent Sessions

11:00 a.m.-12:00 p.m. Unconference

EVENT HIGHLIGHTS

Lightning Lessons

Lightning Lesson presentations are concise talks lasting seven minutes, using a limited number of slides. They aim to present the main point of a topic briefly and effectively, rather than providing a detailed discussion.

Tuesday, September 10	9:35-9:42 a.m. 10:50-11:07 a.m. 2:35-2:52 p.m. 4:05-4:12 p.m.
Wednesday, September 11	9:35-9:42 a.m. 10:50-11:07 a.m. 2:35-2:52 p.m.
Thursday, September 12	9:35-9:42 a.m. 10:50-10:57 a.m. 2:35-2:52 p.m. 4:05-4:12 p.m.
Friday, September 13	9:35-9:42 a.m.

Collaborative Solutions Showcase

The Collaborative Solutions Showcase is a platform designed to encourage meaningful discussions, exchange of ideas, and collaborative problem-solving among meeting attendees. It is intended to foster the interchange of knowledge and promote networking.

Tuesday, September 10	10:45-11:15 a.m. 2:30-3:00 p.m.
Wednesday, September 11	10:45-11:15 a.m. 2:30-3:00 p.m.
Thursday, September 12	10:45-11:15 a.m. 2:30-3:00 p.m.

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Opening Reception

The Opening Reception is an opportunity to network with other attendees to kick off the week at ASPIRE. Learn more about HFES' Technical and Affinity Groups by visiting their tables and speaking to leaders of these groups.

Monday, September 9

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6:00-8:00 p.m.
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McArthur Ballroom

HFES Job Fair

The HFES Job Fair at ASPIRE will provide a forum for employers to find talent and for job seekers to discover potential roles for the next phase in their careers.

Candidates seeking new career opportunities are encouraged to visit with participating employers in the Job Fair. Some employers will have literature display tables and personnel for impromptu discussions. Others will engage in on-site interviewing in semiprivate booths, scheduled in advance of the meeting.

Job seekers attending do not need to register for the Job Fair and should bring copies of CVs/resumes and search the online Job Board in advance of the meeting to apply and potentially meet interviewers onsite.

This year we are offering a resume review session on Wednesday, September 11th for attendees that reserved a time slot online. The review session will include a brief assessment of the resume, targeted advice on things like clarity, keywords and relevance to the desired job and an opportunity for job seekers to ask questions and receive feedback.

Job Fair is located in the Mesa Room during these hours:

Tuesday, September 10	10:00 a.m 5:00 p.m
Wednesday, September 11	10:00 a.m 5:00 p.m
Thursday, September 12	10:00 a.m 5:00 p.m

Concession Lunch Schedule

Tuesday, September 10	12:00-2:00 p.m.	Gold Room
Wednesday, September 11	12:00-2:00 p.m.	Gold Room
Thursday, September 12	12:00-2:00 p.m.	Gold Room

Shuttle Bus to Biltmore Fashion Park

Monday, September 9	10:00 a.m2:00 p.m. 5:00-9:00 p.m.	Conference Entrance
Tuesday, September 10	10:00 a.m2:00 p.m. 5:00-9:00 p.m.	Conference Entrance
Wednesday, September 11	10:00 a.m2:00 p.m. 5:00-9:00 p.m.	Conference Entrance
Thursday, September 12	10:00 a.m2:00 p.m. 5:00-9:00 p.m.	Conference Entrance

CODE OF CONDUCT

HFES is committed to providing a safe and productive meeting environment free of discrimination, hostility, and harassment, in any form, for everyone. As a professional society, HFES is strongly committed to diversity, equity, professional expression of ideas, and the ethical treatment of all members and meeting participants. HFES is committed to emphasizing and enforcing the Society's values and firm belief in civil discourse, even during critical examination and critique of ideas. We value and aim to advance the free exploration of competing ideas and concepts – with a fundamental respect for the rights, dignity, and value of all persons. We aim to promote the shared responsibility to establish, maintain, and protect such an environment for the benefit of all.

For more information, visit hfes.org/About-HFES/Statement-of-Appropriate-Conduct.

HFES ASPIRE BRANDED T-SHIRT

HFES is offering you the option to purchase ASPIRE branded T-shirts along with your registration for this year's International Annual Meeting. A limited number of t-shirts are available for sale on-site but will sell out. Get yours early! Please see below for information:

Price

Available Sizes

\$30 per shirt

S-6XL



INTERNET INFORMATION

HFES attendees can enjoy complimentary Wi-Fi in the meeting space. To connect to the network, please use the information below.

Network

Password

Hilton Honors Meeting

aspire24

HFES SAFE HARBOR STATEMENT

Effective science requires the free exchange of ideas.

HFES asks attendees to create an open, interactive space where all voices are valued and respected. Recognize your privilege and make room for underrepresented, minority, and marginalized voices to be heard. If you are experiencing any obstacles to engaging in conference activities, please contact the meeting Ombuds. Your feedback is important to us.

HFES OMBUDS PROGRAM

HFES is pleased to announce that it will provide Ombuds services at its live, in-person meetings. The Ombuds is an independent, impartial, off-the-record, and confidential resource for meeting attendees to obtain information, seek guidance, voice their concerns about misconduct, harassment, discrimination, and hostility, and to discuss options for how they can deal with concerns that they may experience or observe at HFES meetings.

We are pleased to announce that HFES member Sylvain Bruni will serve in this role. Symposium participants may contact Sylvain Bruni by telephone at <u>(617) 417-0359</u> or by email at <u>Ombuds@hfes.org</u>. See the mobile app for more information.

TECHNICAL TOURS

Technical tours provide HFES Annual Meeting attendees with opportunities to see HF/E in action at special sale prices! The following tour sites have been selected to showcase settings in which researchers and practitioners work. For those tours not sold out in advance, tickets may be purchased during the meeting. Tickets will be sold on a first-come, first-served basis on receipt of fully paid registration. HFES reserves the right to cancel any tour. A full refund will be provided.

To Register

Inquire at the registration desk if you wish to sign up for a tour.

SHUTTLE INFORMATION

Tuesday, September 10

Location: J.S. Held LLC, Phoenix User Research Labs (URL)Tour Start and End Time: 1:00-3:00 p.m.Shuttle Departure: 12:30 p.m.

Wednesday, September 11

Location: ASU CHART Labs Tour Start and End Time: 8:30-10:00 a.m. Shuttle Departure: 7:30 a.m.

Location: Exponent, Inc. Test & Engineering Center Tour Start and End Time: 2:00-3:15 pm Shuttle Departure: 1:15 p.m.

Thursday, September 12

Location: Amazon Fulfillment Center

Tour Start and End Time: 9:30-11:00 a.m.

Shuttle Departure: 8:45 a.m.

Present your ticket and board your shuttle at least 15 minutes before departure (you will receive your ticket at the HFES registration desk on-site). Shuttles will depart on time. No refunds are provided if you miss your shuttle.

PROGRAM AGENDA AND KEY-ATTACHED

MONDAY, SEPTEMBER 9	
8:30 a.m12:00 p.m.	
The Role of Human Factors in Al for Social Good	Workshop
FLW Salon B	
Presenter: Dr. Mark Chignell, University of Toronto	

9:00 a.m4:30 p.m.	
Human-AI Teaming: Design and EvaluationFLW Salon IPresenters: Patricia McDermott, The MITRE Corporation; Ronna ten Brink, The MITRE Corporation	Workshop
Workshop on Election Integrity FLW Salon D Presenters: Dr. Gretchen Macht, University of Rhode Island; Dr. Michael Byrne, Rice University; Dr. Philip Kortum, Rice University	Workshop
Integrative Modeling and Simulation of Human Behavior and Human-Machine Systems With the Queuing Network Architecture <i>FLW Salon G</i> Presenters: <i>Yili Liu, University of Michigan</i>	Workshop
Designing for Implementation: Implementation Science for Human Factors in Healthcare FLW Salon H Presenters: Edmond Ramly, Indiana University, Bloomington; Reid Parks, Indiana University, Bloomington; Nicole Werner, Indiana University, Bloomington; Richard Holden, Indiana University, Bloomington	Workshop
9:00 a.m5:00 p.m.	
Student Career and Professional Development Day Grand Ballroom	Workshop

10:30 a.m5:00 p.m.	
Doctoral Colloquium	Workshop
FLW Salon A	

1:30-5:00 p.m.	
Designing Technology for Older Adults With Cognitive Impairments FLW Salon B	Workshop
Presenters: Dr. Walter Boot, Weill Cornell Medicine; Dr. Sara Czaja, Weill Cornell Medicine; Dr. Wendy Rogers, University of Illinois; Dr. Neil Charness, Florida State University	
TUESDAY, SEPTEMBER 10	

8:00-9:30 a.m.	
Opening Plenary Session	
FLW, Salon E-F	
Featuring HFES awards and honors as well as keynote presenter Joe Castillo.	

9:45-10:45 a.m.	
AS1: Advanced Air Mobility FLW Salon A Session Chair: Amanda Harwood (Northrop Grumman)	Lecture Aerospace Systems Track
The Impact of Flying Experience on Mental Workload Using a Simulated eVTOL Aircraft Author: Jesus Viramontes, Joby Aviation	
Creating Consensus in Advanced Air Mobility: A Standardized Tool for Contextualizing Human-Machine Interactions Authors: Daniel Nguyen, Aptima, Inc.; Samantha Emerson, Aptima, Inc.; Sylvain Bruni, Aptima, Inc; Dr. Summer Rebensky, Aptima, Inc.; Dr. Maria Chaparro-Osman, Aptima, Inc.; Cherrise Ficke, Aptima, Inc.; Olivia Fox Cotton, Aptima, Inc.; Liam Stalker, Aptima, Inc.; Dr. Kent Halverson, Aptima, Inc.	
Right On Time: Required Time of Arrival (RTA) to Anticipate Human Factors Issues With Trajectory-Based Operations (TBO) Authors: Cécile Lescieux, Polytechnique Montreal; Juyeon Kang, Hanseo University; Hans Obas, Polytechnique Montreal; Nami Bae, Bombardier; Philippe Doyon-Poulin, Polytechnique Montreal	
HPM1: Human Performance Modeling FLW Salon B Session Chair: Na Du (University of Pittsburgh)	Lecture Human Performance Modeling Track
Applying the SEEV Model to Assess Where People Will Look: Practical Considerations Author: Paul Green, University of Michigan	
Verification and Validation of Cognitive Workload Models for Adaptive Automation Tasks Author: Charles Rowan, Naval Postgraduate School	
Human-Integrated System Simulation Analysis "in the Wild" Authors: Andrew Abbate, Pacific Science & Engineering Group; Maia Cook, Pacific Science & Engineering Group	
CEDM1: Trust in Human-Machine Teams <i>FLW Salon C</i> Session Chair: Samantha Krening (The Ohio State University)	Lecture Human Performance Modeling Track
Attentional Entrainment Can Reflect Social Motivation in Multi-Team-Systems: Evidence From Laboratory Research Authors: Dirk Schulze Kissing, German Aerospace Center; Carmen Bruder, German Aerospace Center	
Evaluating The Influence of Incorrect Reassurances on Trust in Imperfect Automated Decision Aid Authors: X. Jessie Yang, University of Michigan; Jin Yong Kim, University of Michigan; Olivia Richie, University of Michigan	
Multi-Measure Trust Calibration in Expert Interactions With AI-Enabled Decision Support Systems: A Multiple Cause, Multiple (Behavioral) Indicator Model Author: <i>Myke Cohen, Arizona State University</i>	
USE1: Voice and Virtual Reality Usability and System Evaluation FLW Salon D Session Chair: Amrita Sidhu Maguire (Dell Technologies), Dina Kanaan (University of Toronto)	Lecture Usability and System Evaluation Track
How Does Variation in Al Performance Affect Trust in Al-infused Systems: A Case Study With In-Vehicle Voice Control Systems Authors: Feiqi Gu, The Hong Kong University of Science and Technology (Guangzhou); Haosong Xu, The Hong Kong University of Science and Technology (Guangzhou); Dengbo He, The Hong Kong University of Science and Technology (Guangzhou)	
The Importance of Timing — An Expert Evaluation on Latencies for Voice Assistants Authors: Denise Sogemeier, BMW Group; Yannick Forster, BMW Group; Frederik Naujoks, BMW Group; Josef F. Krems, University of Technology Chemnitz; Andreas Keinath, BMW Group	
Examining the Effects of Embodiment on Working Memory Performance in VR Authors: Linfeng Wu, North Carolina State University; Karen Chen, North Carolina State University	

ST1: Trust in Autonomous Driving Systems: Before, During and After Interactions <i>FLW Salon G</i>	Lecture Surface Transportation
Session Chair: Mansoor Nasir (Ford Motor Company); Dina Kanaan (University of Toronto)	Track
Influence of Demographic Factors on the Structure of Initial Trust in Autonomous Driving Surface Transportation Authors: Zixin Cui, University of Tsukuba; ianzhi Tu, University of Tsukuba; Jieun Lee, Pukyong National University; Makoto Itoh, University of Tsukuba	
Assessing Drivers' Trust, Compliance and Reliance in an Automated Flood Warning System: Effects of Errors Types and System Reliability Authors: Tianyi (Sherry) Mao, Rice University; Katherine R. Garcia, Rice University; Jing Chen, Rice University	
An Exploration of Users' Trust in and Willingness to Pay for Fully Driverless Vehicles After Their First Ride Authors: Zhenyu Wang, The Hong Kong University of Science and Technology (Guangzhou); Haolong Hu, The Hong Kong University of Science and Technology (Guangzhou); Meng Sun, The Hong Kong University of Science and Technology (Guangzhou); Dengbo He, The Hong Kong University of Science and Technology (Guangzhou)	
OE1: Back Exoskeletons FLW Salon H Session Chair: Victor Paquet (University at Buffalo)	Lecture Occupational Ergonomics Track
Effects of Prolonged Exposure to Passive Back-Support Exoskeletons on Gait Spatiotemporal Measures Authors: Jessica Aviles, Clemson University; Duleepa Subasinghe, Clemson University; Divya Subasinghe, Clemson University	
Effects of Back Support Exoskeletons on Perceived Exertion and Mental Workload During Simulated Tile Installation Authors: Ahmad Raza Usmani, Virginia Polytechnic Institute and State University; Mohammad Sadra Rajabi, Virginia Polytechnic Institute and State University; Aanuoluwapo Ojelade, The State University of New York at Buffalo; Sunwook Kim, Virginia Polytechnic Institute and State University; Carisa Harris-Adamson, University of California, Berkeley; Alan Barr, University of California, Berkeley; Maury Nussbaum, Virginia Polytechnic Institute and State University	
Movement and Neuromuscular Control Strategies With Soft Passive Low Back Exoskeleton Use During EMS-Specific Physical Agility Tests Authors: Tiash Rana Mukherjee, Texas A&M University; Tiago Xavier Do Vale Gunter, Texas A&M University; Eshan Manchanda, Texas A&M University, Dr. Oshin Tyagi, University of Michigan; Dr. Ranjana Mehta, University of Wisconsin – Madison	
CYB1: Cyber Deception <i>FLW Salon I</i> Session Chair: <i>Prashanth Rajivan (University of Washington)</i>	Lecture Cybersecurity Track
Examining the Effectiveness of Speech and Earcon Alerts for Aiding Phishing Email Detection Authors: Yining (Elena) Zhang, Rice University; Jing Chen, Rice University; Lila Berger, Rice University	
Agreement and Divergence in Predicting Human Phishing Classification Decisions Authors: Shova Kuikel, University of Texas at El Paso; Maria José Ferreira, Carnegie Mellon University; Kuldeep Singh, University of Texas at El Paso; Palvi Aggarwal, The University of Texas at El Paso; Cleotilde Gonzalez, Carnegie Mellon University	
Where Do Users Look When Deciding If a Text Message Is Safe or Malicious? Authors: Eleni Alexandra Katsarakes, Old Dominion University; Morgan Edwards, Old Dominion University; Jeremiah Still, Old Dominion University	
Three Attempts to Improve Human Deepfake Detection Performance Author: Zachary Tidler, Georgia Institute of Technology	

XR1: Cueing Considerations for Extended-Reality Environments FLW Salon J Session Chair(s): Chidubem Nuela Enebechi (Purdue University); Stephanie Fussell (Kent State University)	Lecture Extended Reality Track
Investigating the Impacts of Different Warning Modalities on Individual's Risk Perception and Response Behaviors Through a Virtual Reality (VR) Experiment Authors: Tolu Sanni, University of Alabama; Ziming Liu, Colorado School of Mines; Jiyoung Lee, Sungkyunkwan University; Wei Song, University of Alabama; Jun Liu, University of Alabama; Yangming Shi, Colorado School of Mines	
2D and 3D Augmented Reality Attention Cueing Comparisons in 3D Target Search Authors: Christopher Wickens, Colorado State University; Brendan Kelley, Colorado State University; Amelia Warden, Colorado State University; Benjamin Clegg, Montana State University; Francisco Ortego, Colorado State University	
Astronaut Performance in Extra-Vehicular Activities Through Augmented Reality: A Study on Lighting Conditions and Cognitive Workload Author(s): Shrreya Aagarwal, Rice University; Melissa Cloutier, Rice University	
HC1: The Role of Simulation-Based Evaluations of Physical and Virtual Mock-Ups in Designing Safer Hospital Environments Grand Ballroom Session Chair: Krystyna Gielo-Perczak (University of Connecticut)	Discussion Panel Health Care Track
The Role of Simulation-Based Evaluations of Physical and Virtual Mock-ups in Designing Safer Hospital Environments Authors: Anjali Joseph, Clemson University; Nora Colman, Children's Healthcare of Atlanta; Deborah Wingler, Applied Research, HKS	
HART1: Human-Al-Robot Teaming and Workload Flagstaff Session Chair: Jennifer Mitchell (Virginia Polytechnic Institute and State University)	Lecture Human AI Robot Teaming (AI) Track
Externalized and Extended Cognition: Cognitive Offloading for Manned-Unmanned Teaming Authors: Giovani Diaz Alfaro, University of Central Florida; Stephen Fiore, University of Central Florida	
Interpretable Models for Near-Real-Time Prediction of Team Cognitive Workload in Complex Sociotechnical Environments Authors: Nurun Naher, University of Central Florida; Mary Jean Amon, University of Central Florida; Stephen M. Fiore, University of Central Florida	
Adaptive Mission Planning: Initial Development of Technologies for Evolving Workload Predictions Across Missions Authors: Anthony Baker, U.S. Army DEVCOM Army Research Laboratory; Aaron Necaise, University of Central Florida; Sarah Thomas, University of Central Florida; David Chhan, U.S. Army DEVCOM Army Research Laboratory; Joe Rexwinkle, U.S. Army DEVCOM Army Research Laboratory	

11:15 a.m12:15 p.m	
F1: Forensic Human Factors FLW Salon A	Industry/ Practitioner Case Study
Session Chair: Jeffrey Martin (DSI Consulting)	Lecture
Taking the Time to Reflect on Perception Response TimeAuthors: Dr. Ellie L. Francis, Visibility, Conspicuity & Human Factors, LLC; Richard Tyrrell, ClemsonUniversity; Jeffrey Andre, James Madison University	Forensics Professional Track
The Role of Human Factors, Ergonomics and 3D Modeling When Evaluating Incidents Involving Micromobility Devices: An E-Scooter Fall Case Authors: Rosemarie Figueroa Jacinto, Rimkus; Janna Webb, JS Held	
Case Study: Can Deaf Truck Drivers Be Trained in a Reasonably Safe Manner; An Equal Employment Opportunity Commission Suit Authors: Steven Arndt, Explico; E. Lilian Garza, Explico; Kyra Phillips, Explico	
Forensic Analysis of a Traffic Crash Involving Human Factors in Design and Mismanagement of an Industrial Facility Authors: Joseph Cohen, Error Analysis, Inc.	
EDU1: Teaching Undergraduate Human Factors—Challenges and Opportunities FLW Salon B	Discussion Panel Education Track
Session Chair: Nancy Stone (Middle Tennessee State University)	
Teaching Undergraduate Human Factors: Challenges and Opportunities Panelists: Joshua Shive, Tennessee State University; Gabriella Hancock, California State University, Long Beach; Alex Chaparro, Embry-Riddle Aeronautical University; Heather Lum, Arizona State University	
S1: Scientist to Practitioner and Back Again—Tales From the Field FLW Salon C	Discussion Panel Safety Track
Session Chair: S. Camille Peres, U.S. Nuclear Regulatory Commission	
Scientist to Practitioner and Back Again—Tales From the Field Panelists: Amy D'Agostino, U.S. Nuclear Regulatory Commission; Kritina (Tina) Holden, Leidos at the NASA Johnson Space Center; Philip Kortum, Rice University; Arwen DeCostanza, U.S. Army Futures Command; Susan Hallbeck, Mayo Clinic	
ED1: Integrative Approaches in Environmental Design	Lecture
<i>FLW Salon D</i> Session Chair: Kaitlin Gallagher (University of Arkansas)	Environmental Design Track
Pathfinder Networks: Evaluating Injury and Safety Using Restaurant Workers' Mental Models Authors: Hari Iyer, Arizona State University; Joel Reynolds, DePaul University; Chang S. Nam, Kettering University; Heejin Jeong, Arizona State University	
Exploring Physiological Responses Through Electrodermal Activity for Evaluating the Impact of Universal Design Features in a Hotel Environment Authors: Taylor Quinn, University at Buffalo; Lora Cavuoto, University at Buffalo; Zahra Vahedi, University at Buffalo	
Employee and Supervisor Perceptions of a Policy Promoting Standing in the Workplace: A Qualitative Study Authors: Kaitlin Gallagher, University of Arkansas; Rebecca Leach, University of Arkansas; Caleb Burruss, University of Oklahoma	

 ST2: Automated Driving Systems: Takeover Measurements and Prediction Methods FLW Salon G Session Chair(s): Shannon Roberts (University of Massachusetts, Amherst); Shashank Mehrotra (Honda Research Institute USA) Towards Integrated Takeover Performance Measurement: Validation of Fréchet Distance as a Takeover Performance Metric Authors: X. Jessie Yang, University of Michigan; Jundi Liu, University of Michigan; Alicia Romo, AAA Foundation for Traffic Safety; William Horrey, AAA Foundation for Traffic Safety; Dawn Tilbury, University of Michigan; Lionel Robert, University of Michigan; Feng Zhou, University of Michigan, Dearborn; Lisa Molnar, University of Michigan Transportation Institute Posture and Performance: Assessing the Influence of Body Posture and Non-Driving-Related Task Engagement on Automated Vehicle Takeover Performance Authors: Nade Liang, Purdue University; Ryan Villarreal, Purdue University; Denny Yu, Purdue University; Mansoor Nasir, Ford Motor Company; Brandon Pitts, Purdue University 	Lecture Surface Transportation Track
Machine Learning for Prediction of Driver Takeover Time in Automated Driving: Insights From Non-Urgent Low Consequence Scenarios Authors: Ryan Thomas Villarreal, Purdue University; Nade Liang, Purdue University; Brandon Pitts, Purdue University; Mansoor Nasir, Ford Motor Company; Denny Yu, Purdue University	
 T1 With CEDM: Cognition in Training and Learning FLW Salon H Session Chair: Jennifer Winner (U.S. Air Force Research Laboratory, The Ohio State University) Examining Cognitive-Based Training to Improve Young Drivers' Speed Compliance in Australia Authors: Oleksandra Molloy, University of New South Wales; Max Prestidge, University of New South Wales A Framework for Mass Casualties Incident Commander Simulation Author: Omer Perry, Ben-Gurion University of the Negev Scaffolding Team Minds: Using Metacognitive Training to Boost Social Cognition and Theory of 	Lecture Cognitive Engineering & Decision Making Track Training Track
Mind for Effective Collaborative Problem-Solving Authors: Fiona Duruaku, University of Central Florida; Blake Nguyen, University of Central Florida; Olivia B. Newton, University of Central Florida; Stephen M. Fiore, University of Central Florida; Florian Jentsch, University of Central Florida	
SS1: Chair's Forum: Advancing Human Factors: Insights from NSF Program Directors FLW Salon I Session Chair(s): Farzan Sasangohar (Texas A&M University)	Special Session
 PP1: Celebrating the Contributions of Dr. Robert W. Proctor to the Field of Human Factors FLW Salon J Session Chair(s): Kim Vu (California State University, Long Beach) Celebrating the Contributions of Dr. Robert W. Proctor to the Field of Human Factors Authors: Patricia DeLucia, Rice University; Christopher Wickens, Alion Science and Technology; Christopher Mayhorn, North Carolina State University; Peter Hancock, Peter Hancock; Jing Chen, Rice University; Kim-Phuong L. Vu, California State University Long Beach; Tianfang Han, University of Idaho 	Invited Symposium Perception and Performance Track

 HC2: Equity in Healthcare I Grand Ballroom Session Chairs: Dominique Engome Tchupo (University of Rhode island); Aanuoluwapo Ojelade (University at Buffalo) Using a Critical FMEA Approach to Identify Equity-Related Failures in Usability Evaluations of Health Technologies Authors: D. Ruben Tjhie, University of Toronto; Enid Montague, University of Toronto; Joseph Cafazzo; University of Toronto Disabled Individuals' Negative Perceptions of Mobile Health Apps: Design Guidance for HFE Practitioners Authors: Eleanore Scheer, University of Virginia; Jessica Arora, University of Virginia; Courtney C. Rogers, University of Virginia; Claire Wellbeloved-Stone, Blue Trunk Foundation; Mary Collins, TIDI Products; Rupa S. Valdez, University of Virginia Using Patient Journey Mapping to Design More Equitable Maternal Care Authors: Nicole Hicks, University of Toronto; Kristin Tully, University of North Carolina - Chapel Hill; Christopher Goodier, Medical University of South Carolina; Sreenath Chalil Medathil, State University of New York at Binghamton; Ayaba Logan, Medical University of South Carolina; Myrtede Alfred, University of Toronto 	Lecture Health Care Track
 HART2: Human-AI-Robot Teaming Trust 1 (Groups) Flagstaff Session Chair: Kieran Smith (University of Colorado, Draper) The Relevance of Seemingly Irrelevant Group Interactions for Automation Trust: An Analysis of Naturalistic Team Conversations on Contingent Behaviors Authors: Vianney Renata, University of Wisconsin - Madison; Morgan Klaeser, University of Wisconsin - Madison; John Lee, University of Wisconsin - Madison Toward a Linguistic Fingerprint™ of Trust Authors: Derek Koehl, The University of Alabama in Huntsville; Lisa Vangsness, The University of Alabama in Huntsville Navigating Trust: The Interplay of Trust in Automation and Team Communication in an Extended Simulated Military Mission Authors: T'kara Mullins, University of Central Florida; Aaron Necaise, University of Central Florida; Stephen Fiore, University of Central Florida; Mary Jean Amon, University of Central Florida 	Lecture Human AI Robot Teaming (AI) Track
1:30-2:30 p.m	
AS2: The Promise of Urban Air Mobility <i>FLW Salon A</i> Session Chair: <i>Kim-Phuong Vu</i> (<i>California State University, Long Beach</i>) The Promise of Urban Air Mobility (UAM) Panelists: <i>Quang Dao, NASA Ames Research Center; James Cunningham, Edwards Airforce Base;</i> <i>Mike Matessa, Collins Aerospace; Vernol Battiste, San Jose State University Research Foundation;</i> <i>Thomas Strybel, California State University, Long Beach</i>	Discussion Panel Aerospace Systems Track
 EDU2: VR and Generative AI—Tools for Learning and Research FLW Salon B Session Chair: Heather Lum (Arizona State University) Leveraging ChatGPT for Qualitative Data Analysis to Assess Its Potential Efficiency and Scalability Authors: India Allen, Visionary Consulting Partners, LLC; Stephanie Thomas, Visionary Consulting Partners, LLC; Renee Jones, Spectrum Software Technology, Inc.; Claire Hayes Watson, Visionary Consulting Partners, LLC; Kyle Maddox, U.S. Department of Veterans Affairs Perception in Virtual Worlds: Psychology and Design Students Collaborate to Study User Experience in Videogames Authors: Benjamin van Buren, The New School; Colleen Macklin, Parsons School of Design 	Lecture Education Track

CEDM2: Human and Machine Teaming FLW Salon C Session Chair: Karen Feigh (Georgia Institute of Technology) Individual Characteristics and Operator Dependence Behaviors in Human-Automation Teams:	Lecture Cognitive Engineering & Decision Making Track
An Exploratory Study Authors: Drew Hidalgo, University of Michigan; Patrik T. Schuler, University of Michigan; X. Jessie Yang, University of Michigan	
An Evaluation of Mental Fatigue in Teaming Environments: A Systematic Reivew Authors: Camden Brady, Clemson University; Sarvesh Sawant, Clemson University; Kapil Madathil, Clemson University; Nathan McNeese, Clemson University	
Disengaging Automation: Understanding Drivers' Decisions to Turn Off Vehicle Automation Using an Evidence Accumulation Framework Authors: Amudha Varshini Kamaraj, University of Wisconsin – Madison; John Lee, University of Wisconsin – Madison; Zhenhao Zhou, University of Wisconsin – Madison; Xinzhi Zhong, University of Wisconsin – Madison; Vianney Renata, University of Wisconsin – Madison; Wissam Kontar, University of Wisconsin – Madison; Soyoung Ahn, University of Wisconsin – Madison; Dan Negrut, University of Wisconsin – Madison	
SU1: Are Humans Still Necessary? FLW Salon D	Alternative Format
Session Chair: Judi See (Sandia National Laboratories)	
Up for Debate: Are Humans Still Necessary? Authors: Judi See, Sandia National Laboratories; Julie Gilpin-McMinn, Spirit AeroSystems	
ST3: Mental Models of ADAS FLW Salon G Session Chairs: Jon Antin (Virginia Tech Transportation Institute); Anne Garcia (National Transportation Safety Board)	Lecture Surface Transportation Track
Transfer of Learning on Driver's Mental Model of ADAS Author: Jimin Kim, University of Iowa	
Consumer Education With and Without Responsibility Information for Two ADAS Over-the-Air Updates Authors: John Gaspar, University of Iowa; Justin Mason, University of Iowa; Cher Carney, University of Iowa; John Lenneman, Toyota Collaborative Safety Research Center	
OE2: Update on Ergonomics Standards in the United States FLW Salon H Session Chair: Gary Orr (USDOL)	Discussion Panel Occupational Ergonomics Track
Update on Ergonomics Standards in the United States Author(s): Richard Goggins, Washington State Department of Labor and Industries; Breca Tschida, Minnesota OSHA; David Cochran, University of Nebraska Lincoln	
SS2: Pitch Clinic for Practitioners <i>FLW Salon I</i> Session Chair: <i>Sylvain Bruni (Aptima, Inc.)</i>	Special Session

 XR2: Ergonomics and Workload in Augmented Reality FLW Salon J Session Chairs: Stephanie Fussell (Kent State University); Randall Spain (U.S. Army DEVCOM Soldier Center) Utilizing Motion Capture to Quantify Physical Workload in Augmented Reality Learning Environments Authors: Varun Pulipati, University of Missouri, Columbia; Jung Hyup Kim, University of Missouri, Columbia; Fang Wang, University of Missouri, Columbia; Sara Mostowfi, University of Missouri, Columbia; Danielle Oprean, University of Missouri, Columbia; Kangwon Seo, University of Missouri, Columbia Ergonomic Augmented Reality Glasses Development for Workload Detection With Biofeedback Data and Machine Learning Author: Junho Park, Santa Clara University 	Lecture Extended Reality Track
Understanding the Influence of Fatigue on Full Arm Gestures in Augmented Reality Environments Authors: Jung Hyup Kim, University of Missouri, Columbia; Varun Pulipati, University of Missouri, Columbia; Ching-Yun Yu, University of Missouri, Columbia	
HC3: Ergonomics in Healthcare I Grand Ballroom Session Chair: Kermit Davis (University of Cincinnati)	Lecture Health Care Track
Classifying Restricted Knee Flexion and Affected Sides Using Plantar Pressure Data During Walking: A Preliminary Study Authors: Seobin Choi, Oregon State University; Gwanseob Shin, Ulsan National Institute of Science & Technology	
A Novel Labeling Method of Physiological-Based Pressure Pain Assessment Among Patients With and Without Chronic Low Back Pain Authors: Wenchao Zhu, Northeastern University; Yan Xiao, Northeastern University; Yingzi Lin, Northeastern University	
Do Exoskeletons Support Minimally Invasive Surgical Postures? A Systematic Evaluation Across a Series of Typical Surgical Postures Authors: Alec Gonzales, Clemson University; Jackie Cha, Clemson University	
HART3: Human-AI-Robot Teaming Trust 2 (Dynamics) Flagstaff Session Chair: Jade Driggs (Wichita State University)	Lecture Human AI Robot Teaming (AI) Track
Predicting Trust Dynamics With Personal Characteristics Authors: Hyesun Chung, University of Michigan; X. Jessie Yang, University of Michigan	
Trust Is Contagious: Social Influences in Human-Human-AI Team Authors: Emanuel Rojas, Georgia Institute of Technology; Mengyao Li, Georgia Institute of Technology	
Behave Yourself! Behavioral Indicators of Trust in Human Agent Teams Authors: Kendall Carmody, Florida Institute of Technology; Vivek Sharma, Florida Institute of Technology; Arianna Addis, Florida Institute of Technology; Daniel Nguyen, Aptima, Inc.; Cherrise Ficke, Aptima, Inc.; Amanda Thayer, Florida Institute of Technology; Jessica Wildman, Florida Institute of Technology; Meredith Carroll, Florida Institute of Technology	

3:00-4:00 p.m	
A1: Embrace Aging for a Better Future FLW Salon A Session Chair: Yue Luo (San Jose State University, Department of Industrial and Systems Engineering)	Lecture Aging Track
A Systematic Review Towards a Comprehensive Framework for Measuring Non-Chronological Age Authors: Nidhi Milind, San Jose State University; Poorva Jain, San Jose State University; Gaojian Huang, San Jose State University	
Exploring Attitudes Towards Smart Home Technology Through Focus Groups: Comparing Older Adults With and Without Health Conditions Authors: Poorva Jain, San Jose State University; Swethasree Pendyala, San Jose State University; Egbe-Etu Etu, San Jose State University; Zhi Zhang, San Jose State University; Minal Shah, San Jose State University; Jordan Larot, San Jose State University; Gaojian Huang, San Jose State University	
Challenges of Older Adults in Adopting Automated Vehicles: A Systematic Review Authors: Brandon Pitts, Purdue University; Gen Li, Purdue University; Jing Zang, Purdue University; Myeongkyu Lee, Purdue University	
I <mark>D1: Individual Differences Related to Physical and Mental Health</mark> FLW Salon B Session Chair(s): Mustafa Demir (Texas A&M University)	Lecture Individual Differences in Performance Track
Exploring Neurodiverse Collaboration Between Autistic and Non-autistic Adults in an Online Setting: A Pilot Study Authors: Manhua Wang, Virginia Polytechnic Institute and State University; Megan Fok, Virginia Polytechnic Institute and State University; Jisun Kim, Virginia Polytechnic Institute and State University; Victoria Izaac, Virginia Polytechnic Institute and State University; Caroline Byrd Hornburg, Virginia Polytechnic Institute and State University; Angela Scarpa, Virginia Polytechnic Institute and State University; Myounghoon Jeon, Virginia Polytechnic Institute and State University; Sunwook Kim, Virginia Polytechnic Institute and State University	
Understanding Contemporary Digital Habits, Behavior and Digital Addiction Interventions : A Meta Analysis Authors: Yesh Chala, Arizona State University; Heather Lum, Arizona State University	
Impacts of Disability Duration and Physical Activity Level on Wheelchair Propulsion Strategies in People with T12/L1 Spinal Cord Injury Authors: Woojin Park, Seoul National University; Jooeun Ahn, Seoul National University	
<mark>S2: Human Factors in High-Risk Environments</mark> FLW Salon C Session Chair(s): Olugbenga Gideon (University of Idaho, Idaho National Laboratory); Abigail Jei (Texas A&M University)	Lecture Safety Track
Hunting From Elevated Tree Stands: Hunters' Safety Practices and Attitudes Regarding the Use of Personal Fall Arrest Systems Authors: William Vigilante, Vigilante Forensic; Raymond Lim, Pierce College;	
The Impact of Time Pressure on Human Performance in Procedural Tasks in Oil and Gas Industries Authors: Farzan Sasangohar, Texas A&M University; Yehee Park, Texas A&M University	
Beyond Compliance - Understanding Everyday Work Variability Through an Observational Study of Worker Interaction With Paper and Digital Procedures in a Petrochemical Facility Authors: Atif Ashraf, Texas A&M University; Farzan Sasangohar, Texas A&M University; S Camille Peres, NRC	

 USE2: Voting and Workload Usability and System Evaluation FLW Salon D Session Chair: Amrita Sidhu Maguire (Dell Technologies) Emergence of Paper-Digital Systems: A Usability Evaluation of Single-Page Versus Multipage Digital Instructions in a Ballot Mailing Task Authors: Annlyle Diokno, Rice University; Nessa Kim, Rice University A Tension: Fortifying Usability while Safeguarding Voter Independence in Military Voting Solutions Authors: Nessa Kim, Rice University; Annlyle Diokno, Rice University; Michael Byrne, Rice University; Pilip Kortum, Rice University Early-Stage Testing of Thermal Power Dispatch Simulator for Subjective Mental Workload and Evolution Time Authors: Roger Lew, University of Idaho; Olugbenga Gideon, University of Idaho; Benjamin Barton, University of Idaho; Zeth Dubois, University of Idaho; Thomas Ulrich, Idaho National Laboratory 	Lecture Usability and System Evaluation Track
 ST4: Advances and Challenges in Vehicle Electrification FLW Salon G Session Chair: Linda Boyle (New York University) Advances and Challenges in Vehicle Electrification Panelists: Pnina Gershon, Massachusetts Institute of Technology; David Rempel, University of California, Berkeley; Justin Mason, University of Iowa; Gretchen Macht, University of Rhode Island; Raul Arbelaez, Insurance Institute for Highway Safety 	Discussion Panel Surface Transportation Track
 T2 With XR: Extended Reality for Training and Learning <i>FLW Salon H</i> Session Chair: Martin Schüler (Swedish Defence University, Sweedish Armed Forces) Multimodal Feedback to Improve Performance of Order Picker Truck Drivers Using a Virtual Reality Simulator Authors: Md Shafiqul Islam, Virginia Polytechnic Institute and State University; Hsiang-Wen Hsing, Virginia Polytechnic Institute and State University; Sunwook Kim, Virginia Polytechnic Institute and State University; Nathan Lau, Virginia Polytechnic Institute and State University; Maury Nussbaum, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University The Design and Evaluation of an AR-based Adaptive Triage Training for Emergency Responders Authors: Ronak Ranjitkumar Mohanty, University of Wisconsin - Madison; Ranjana Mehta, University of Wisconsin - Madison Unveiling Virtual Reality Overheads and Their Potential Impact on Flightcrew Training Authors: Fiona Duruaku, University of Central Florida; Florian Jentsch, University of Central Florida; Nathan Sonnenfeld, University of Central Florida; Florian Jentsch, University of Central Florida 	Lecture Invited Symposium Training Track Extended Reality Track

LBR1: Late-Breaking Resuts	Lecture Late Breaking
FLW Salon I	Results
Session Chair: Farzan Sasangohar (Texas A&M University)	
A Comprehensive Methodological Framework for Anthropometric Head Shape Modeling Using Small Dataset	
Authors: Leonardo Wei, Texas Tech University; Suman Chowdhury, Texas Tech University	
PFC and Motor Activation Under Stress During Fatiguing Exercise in Young Adults Authors: Nourin Mohsin, University of Michigan; Dr. Oshin Tyagi, University of Michigan	
Predict and Model Worker Trust for Automated Vehicles in Manufacturing Plants Authors: Mobina Amrollahi, Iowa State University; Rindirisia Wangira, Iowa State University; Dr. Jundi Liu, Iowa State University	
Enhancing Team Performance and Task Duration Through Cross-Training Authors: Jenna Korentsides, Embry-Riddle Aeronautical University; Zander Miller,Embry-Riddle Aeronautical University; Dr. Joseph Keebler, Embry-Riddle Aeronautical University	
Trunk and Upper Arm Postures in Mature vs. Young Workers of the Logistic Industry. A Real-World Study Based on Inertial Wearable Sensors Authors: Dr. Micaela Porta, University of Cagliari; Giulia Casu, University of Cagliari; Bruno Leban, University of Cagliari; Maury Nussbaum, Virginia Polytechnic Institute and State University; Massimiliano Pau, University of Cagliari	
Enhancing Elderly-Robot Interactions (ERI): A Review of 10 Years of the HRI Conference Authors: Jiongyu Chen, University of Michigan; Carl Fan, University of Michigan; Hyesun Chung, University of Michigan; X. Jessie Yang, University of Michigan	
PP2: Multiple Resource Theory and Task Performance	Lecture
<i>FLW Salon J</i> Session Chair: Colleen Patton (North Carolina State University); Md Mamunur Rashid (University of Central Florida, The Readability Consortium)	Perception and Performance Track
The Multiple Resource Theory and Model. Some Misconceptions in Data Interpretations Author: Christopher Wickens, Colorado State University	
Occipital Multiscale Entropy as a Generalized Marker of Differential Task Performance Authors: L. Jack Rhodes, Ball Aerospace; Lorraine Borghetti, U.S. Air Force Research Laboratory; Megan Morris, U.S. Air Force Research Laboratory	
Strategic Attention Guidance: The Impact of Dual and Single Cues in Wide Field of View Searches Author: Amelia Warden, Colorado State University	
HC4: Patient Safety and Quality in Healthcare I Grand Ballroom	Lecture Health Care Track
Session Chairs: Maryam Tabibzadeh (California State University, Northridge); Shababa Matin (Rice University)	
ACESO: An Optimized System for Collecting Granular Data on Patient Care Sequences and Infection Prevention Practices	
Authors: Jaqueline Pereira Da Silva, University of Iowa Carver College of Medicine; Loreen Herwaldt, University of Iowa Carver College of Medicine	
Assessing GenAl's Intra-Agent Reliability in Coding Unstructured Human Factors Data within Patient Safety Reports: An Empirical Investigation Authors: Douglas Wiegmann, University of Wisconsin – Madison; Arsalan Ahmad, University of Wisconsin – Madison; Felix Nguyen, University of Wisconsin – Madison; Scott Shappell, ERAU	
Evaluating Active Learning Strategies for Automated Classification of Patient Safety Event Reports in Hospitals	
Authors: Shehnaz Islam, University of Toronto; Myrtede Alfred, University of Toronto; Dulaney Wilson, Medical University of South Carolina; Eldan Cohen, University of Toronto	

HART4: Co-Evolution in HART	Lecture Human Al Robot
<i>Flagstaff</i> Session Chair: Derek Koehl (University of Alabama at Huntsville)	Teaming (AI)
Design Principles for Accessibility and Transparency to Facilitate Co-Learning in Human-AI Teams Author: <i>Sylvain Bruni, Aptima, Inc.</i>	
Mapping Human-Agent Co-Learning and Co-Adaptation: A Scoping Review Authors: Xiaomei Wang, University of Louisville; Shruti Kumar, University of Louisville; Dr. Xlaoyu Chen, University at Buffalo	
"My Left is Not Your Left": Approaches for Autonomously Eliciting and Representing Human Teammate's Spatial Mental Models for Shared Mental Models in Human Autonomous Teams Authors: Jayde King, U.S. Air Force Research Laboratory; Dr. Valay Shah, Leidos; Ian Dye, Leidos; Rachel Wong, Leidos	
3:00-8:00 p.m	
University Lab Posters McArthur Foyer	
Adaptive Cognitive Systems Laboratory at Iowa State University; Autonomy & Robotics for Collaborative Systems Lab; The University of Tennessee, Knoxville; Center for Ergonomics Labs at the University of Michigan; Center for Human, AI, and Robot Teaming (CHART) at Arizona State University; Design & Implementation Sciences Program, Health & Wellness Design Department, Indiana University School of Public Health Bloomington; Engineering for Democracy Institute, University of Rhode Island; GMU Human Factors & Applied Cognition Program; Human Factors & Applied Statistics Lab - University of Toronto; Human Factors and Ergonomics Program at the University of Wisconsin Madison; Human Factors Labs at Embry-Riddle Aeronautical University; Human Factors Research Facilities at California State University, Long Beach; Human Factors Safety Lab (HFSL), University of Minnesota; Human Optimization Modelling Lab (HOMLab), University of Waterloo; Human Systems Engineering Laboratories at Arizona State University; Humans and Technology Laboratory (HATLab); Michigan Tech; NeuroErgonomics Lab at University of Wisconsin Madison; Occupational Safety, Ergonomics and Injury Prevention Center at Auburn University; Purdue University; Rice University; Sawyer Laboratories, University of Central Florida; SHARE Lab, Texas Tech University; The Challenge Metacognition and Perception (ChaMP) Lab at The University of Alabama in Huntsville; The Cognitive Performance Lab at Oklahoma State University; University of Central Florida;	

University of Virginia; University of Washington; Virginia Polytechnic Institute and State University; Virtual and Augmented Reality Laboratory at North Carolina State University

4:15-5:15 p.m

CS1: Social Media and Voting Systems FLW Salon A Session Chair: Alec Gonzales (Clemson University)	Lecture Computer Systems Track
Two-Step Ballot Verification: Mitigating the Impact of the Hawthorne Effect on Vote Flipping Studies Authors: Juan E. Gilbert, University of Florida; Ashley Hart, University of Florida; Jasmine McKenzie, University of Florida; Alaina Smith, University of Florida; Darian Jennings, University of Florida	
Which Source Matters More? The Influence of Sharer Versus Publisher on Trust in News on Social Media Authors: Claire Gendron, Clemson University; Ayana Monroe, Cornell University; Errol Francis II, Clemson University; Dr. Emily Sidnam-Mauch, Clemson University; Susan McGregor, Columbia University; Dr. Kelly Caine, Clemson University	

GS1: The Good, the Bad and the Unknown: AI for the Assessment of Human Performance, Training, and Selection FLW Salon B Session Chairs: Michael Lowe (Georgia Tech Research Institute); Theresa Kessler (Georgia Tech Research Institute)	Discussion Panel General Sessions Track
The Good, the Bad, and the Unknown: AI for the Assessment of Human Performance, Training and Selection Panelists: Tracy Sanders, The MITRE Corporation; Mica Endsley, SA Technologies; Gabriella Hancock, California State University, Long Beach; Joseph Lyons, U.S. Air Force Research Laboratory; John Lee, University of Wisconsin – Madison; Clayton Hutto, Georgia Tech Research Institute	
CEDM3: Decision-Centered Design for Post-Implementation Analysis of Automation in the Petrochemical Industry <i>ROOM: FLW Salon C</i> Decision-Centered Design for Post-Implementation Analysis of Automation in The Petrochemical Industry Authors: Michelle Wang, Applied Decision Science, LLC; Laura Militello, Applied Decision Science, LLC; Rachel Morris, Applied Decision Science, LLC; Vance Flosenzier, INVISTA	Industry/ Practitioner Case Study Cognitive Engineering & Decision Making Track
 USE3: Community and Population Usability and System Evaluation FLW Salon D Session Chair: Jerry Burpee (INTUITIVE Research & Technology Corp) Using a Community-Engaged Approach to Develop a Safe and Effective Teleoperation Workstation in Construction Authors: Yiyang Fang, University of Southern California; Burcin Becerik-Gerber, University of Southern California; California; California; California; California; California; Patrick Borges Rodrigues, University of Southern California; Zihao Wang, University of Southern California; Shawn Roll, University of Southern California Utilizing Human-Centered Design To Improve Discovery, Analysis and Collaboration In Population Migration Research Authors: Werner Born, Aptima, Inc.; Christina Blatsos, Aptima, Inc. Assessing Mobile Health Apps for Diabetes Management for Underserved Communities Authors: Farzan Sasangohar, Texas A&M University; Abby Somich, Texas A&M University; Jesus Horacio Carrillo Leal, Texas A&M University 	Lecture Usability and System Evaluation Track
ST5: Driver Attentional States and Situation Awareness—Part 1 FLW Salon G Session Chairs: Patricia Tice (UCF; CREWS, LLC); Wei-Hsiang Lo (San Jose State University) Driver Situational Awareness Prediction During Takeover Transitions: A Multimodal Machine Learning Approach Authors: Lesong Jia, University of Pittsburgh; Na Du, University of Pittsburgh Exploring the Relationship Between Drivers' Stationary Gaze Entropy and Situation Awareness in Level-3 Automation Author: Wen Ding, University of Waterloo Improving Situation Awareness in Partially Automated Vehicles: The Effectiveness of Redesigned Visual Signals Authors: Okkeun Lee, Stanford University; Rebecca Currano, Stanford University; Dave Miller, Tufts University; Seungbin Yim, Stanford University; David Sirkin, Stanford University	Lecture Surface Transportation Track

OE3: Tools and Analysis FLW Salon H Session Chairs: Lori Basham (United States Navy); Joseph Parham (US Army)	Lecture Occupational Ergonomics Track
Preliminary Evaluation of a Smartphone-Based Markerless Motion Capture System for Joint Kinematics Measurement During Symmetric and Asymmetric Lifting Tasks Authors: Mina Salehi Sedeh, Oregon State University; Jeong Ho Kim, Oregon State University	
Working Hands: A Dynamic Hand Anthropometry Survey of Manufacturing Population Authors: Emily Seifert, University of Minnesota; Vanessa Segura Duque, University of Minnesota; Tse-Hsun Kuo, University of Minnesota; Kelsey Hitt, Toyota; Peeyush Kumar, Toyota; Dr. Linsey Griffin, University of Minnesota	
Video-Based Lifting Action Recognition Method Using Rank-Altered Kinematic Feature Pairs Authors: SeHee Jung, North Carolina State University; Bingyi Su, North Carolina State University; Lu Lu, North Carolina State University; Liwei Qing, North Carolina State University; Xu Xu, North Carolina State University	
SS4: Becoming a Leader Within HFES FLW Salon I	Special Session
Session Chair(s): Missie Smith; Debbie Boehm-Davis	
XR3: Virtual Reality and the Individual: Designing Better Virtual Environments FLW Salon J	Lecture Extended RealityTrack
Session Chairs: Fangyuan Cheng (NC State); Linfeng Wu (North Carolina State University) Smelling What You See in Virtual Reality: Impacts on Mood, Memory, and Anxiety	
Authors: Steve Kass, University of West Florida	
Sex and Age Differences in Virtual Reality (VR) Sickness Susceptibility in Forklift Driving Simulation Authors: Md Shafiqul Islam, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University	
Negative Emotions Post-Virtual Reality Usage: A Preliminary Exploratory Study Using Online Forums Authors: <i>Emily Fang, North Carolina State University; Anand Sivaramakrishnan, North Carolina State</i> <i>University; Karen Chen, North Carolina State University</i>	
HC5: Wandering Through Healthcare: What Patient Journeys Can Tell Us About Improving Patient Safety, Health and Well-Being Grand Ballroom	Discussion Panel Health Care Track
Session Chairs: Maha Khalid (Rice University); Pratima Saravanan (Houston Methodist Hospital)	
Negative Emotions Post-virtual Reality Usage: A Preliminary Exploratory Study Using Online Forumswandering Through Healthcare: What Patient Journeys Can Tell Us About Improving Patient Safety, Health and Well-Being Panelists: Nicole Werner, Indiana University, Bloomington; Megan Salwei, Vanderbilt University Medical Center; Rupa Valdez, University of Virginia; Elizabeth Papautsky, University of Illinois Chicago; Natalie Benda, Columbia University; Shilo Anders, Vanderbilt University Medical Center; Hanna Barton, University of Wisconsin – Madison	
HART5: Is It Time to Kill Fitts' List? Perspectives on Novel Frameworks for Human- Machine Teaming Across Industry, Academia and Government Flagstaff	Discussion Panel Human AI Robot Teaming (AI) Track
Session Chair: Sylvain Bruni (Aptima, Inc.)	
Is It Time to Kill Fitts' List? Perspectives on Novel Frameworks for Human-Machine Teaming Across Industry, Academia, and Government Panelists: Adam Fouse, Aptima, Inc.; Nancy Cooke, Arizona State University; Kelly Neville, The MITRE Corporation; Martijn IJtsma, The Ohio State University; Daniel Zelik, U.S. Air Force Research Laboratory	

WEDNESDAY, SEPTEMBER 11

All Day

University Lab Posters

McArthur Foyer

Adaptive Cognitive Systems Laboratory at Iowa State University; Autonomy & Robotics for Collaborative Systems Lab; The University of Tennessee, Knoxville; Center for Ergonomics Labs at the University of Michigan; Center for Human, AI, and Robot Teaming (CHART) at Arizona State University; Design & Implementation Sciences Program, Health & Wellness Design Department, Indiana University School of Public Health Bloomington; Engineering for Democracy Institute, University of Rhode Island; GMU Human Factors & Applied Cognition Program; Human Factors & Applied Statistics Lab - University of Toronto; Human Factors and Ergonomics Program at the University of Wisconsin Madison; Human Factors Labs at Embry-Riddle Aeronautical University; Human Factors Research Facilities at California State University, Long Beach; Human Factors Safety Lab (HFSL), University of Minnesota; Human Optimization Modelling Lab (HOMLab), University of Waterloo; Human Systems Engineering Laboratories at Arizona State University; Humans and Technology Laboratory (HATLab); Michigan Tech; NeuroErgonomics Lab at University of Wisconsin Madison; Occupational Safety, Ergonomics and Injury Prevention Center at Auburn University; Purdue University; Rice University; Sawyer Laboratories, University of Central Florida; SHARE Lab, Texas Tech University; The Challenge Metacognition and Perception (ChaMP) Lab at The University of Alabama in Huntsville; The Cognitive Performance Lab at Oklahoma State University; University of Central Florida; University of Virginia; University of Washington; Virginia Polytechnic Institute and State University; Virtual and Augmented Reality Laboratory at North Carolina State University

8:30-9:30 a.m.

 AS3: Aerospace Systems With Usability and Systems Evaluation FLW Salon A Session Chair: Katharine Woodruff (Collins Aerospace) Analyzing the Fleet Manager Interface User Experience with Qualitative Data Coding Authors: Gregory Costedoat, San Jose State University; Gita Hodell, NASA Ames Research Center; Erik Larsen, ASRC Federal Data Solutions, LLC Developing Adaptive Information Presentation for Spaceflight Crews and Ground Support for Human Spaceflight Beyond Low Earth Orbit Authors: Lacey Davis, Purdue University; Barrett Caldwell, Purdue University 	Industry/ Practitioner Case Study Lecture Aerospace Systems Track Usability and System Evaluation Track
Applying Human Factors Analysis in Designing Accessible Lavatories on Single-Aisle Aircraft Authors: Erin Maddix, The Boeing Company; Kylen Lawless, The Boeing Company; Carrie Lin, The Boeing Company	
 CEDM4: Usability FLW Salon C Session Chair: Sherry Chappell (Federal Aviation Administration (Retired)) Leaving Money on the Table: As Diagnostic Aids Become More Useful, Operators Use Them Less Efficiently Authors: Fernando Munoz Gomez Andrade, Oregon State University; Jason S. McCarley, Oregon State University; Christopher Wickens, Colorado State University; Megan Bartlett, University of Adelaide; Experts and Non-Experts Use Diagnostic Aids Inefficiently: A Reanalysis of Cao et al. (2023) Authors: Megan Bartlett, The University of Adelaide; Jason McCarley, Oregon State University; Human Perception of Floor Plan Evacuatability: How Easy Is it to Evacuate? Author: Stephen B. Gilbert, Iowa State University; 	Lecture Cognitive Engineering & Decision Making Track

Lecture

Aerospace Systems Track Usability and System Evaluation Track

PD1: Product Design Technical Group Sponsored Panel on Methods for Voice UI Development FLW Salon D Session Chair: Paul Ritchey (Consumer Reports)	Discussion Panel Product Design Track
oduct Design Technical Group Sponsored Panel on Methods for Voice UI Development thors: Kathryn Tippey, Philips; Crispin Reedy, Versay Solutions; Laura Fulton, Google; Adam Emfield, If-employed; Ryan Biette, Google; Kelly Caine, Clemson University;	
 ST6: Driver Attentional States and Situation Awareness—Part 2 FLW Salon G Session Chair(s): Joel Cooper (MEA Forensic); Jundi Liu (Iowa State University) Estimating Mode Awareness of Drivers Interacting With an Automated Vehicle Authors: Hansol Rheem, University of Wisconsin - Madison; Joonbum Lee, University of Wisconsin - Madison; John D. Lee, University of Wisconsin - Madison; Joseph F. Szczerba, General Motors; Roy Mathieu, General Motors; Akilesh Rajavenkatanarayanan, General Motors; Supporting Driver Attention Towards Potential Hazards During Takeover: A Preliminary Result Authors: X.Jessie Yang, University of Michigan; Jundi Liu, Iowa State University; Alicia Romo, AAA Foundation for Traffic Safety; William Horrey, AAA Foundation for Traffic Safety; Dawn Tilbury, University of Michigan; Lionel Robert, University of Michigan; Feng Zhou, University of Michigan, Dearborn; Lisa Molnar, University of Michigan Transportation Institute; Post-Trip Mind-Wandering Assessment: A Scale and Protocol for Evaluating Train Driver Focus Across Multiple Journey Phases Authors: Joep von Berg, NS; Ellemieke van Doorn, NS 	Industry/ Practitioner Case Study Lecture Surface Transportation Track
 OE4: Exoskeleton Applications FLW Salon H Session Chair: Arunkumar Pennathur (University of Texas at El Paso) Task Characteristics Impact Optimal Support Settings of Arm Support Exoskeletons Author: Carisa Harris Adamson, University of California; Flexible Sensor-Based Whole-Body Biomechanics of Exoskeleton-Assisted Patient Handling Authors: Yinong Chen, Texas A&M University; Liying Zheng, National Institute for Occupational Safety and Health; Wei Yin, Texas A&M University; Xudong Zhang, Texas A&M University; Biomechanical Assessment of Exoskeleton Intervention for Injured and Recovering Workers: A Simulation Study of Bending Tasks Authors: Darlington Egeonu, University of Michigan, Dearborn; Bochen Jia, University of Michigan, Dearborn; Jesudara Omidokun, University of Michigan, Dearborn; Liang Yang, South China University of Technology 	Lecture Occupational Ergonomics Track

ME1: Macroergonomics	Lecture
<i>FLW Salon I</i> Session Chair: <i>Hanna J Barton (University of Wisconsin - Madison)</i>	Macroergonomics Track
Leveraging Systemic Contributors and Adaptations for Implementation Design: The IMPActS Workshop	
Authors: Christine Jefferies, The Ohio State University; Laura Maguire, The Ohio State University; Amanda Girth, The Ohio State University; Michael F. Rayo, The Ohio State University	
Gauging the Ergonomics Temperature: Knowledge and Awareness Among the US Population and the Disparity Among Demographics Author: Jia-Hua Lin, SHARP, Washing Department of Labor and Industries	
Macroergonomics in Practice: A Needs Assessment of the Health Improvement Through Employee Control (HITEC) Project Authors: Michelle Robertson, University of Connecticut; James Hughes, University of Connecticut; Theresa Parker, University of Connecticut	
Sleep, Wellness and Mood of Personnel Standing Watch on US Navy Information Warfare Watchfloors Authors: Nita Shattuck, Naval Postgraduate School; Panagiotis Matsangas, Naval Postgraduate School; Christopher McClernon, Naval Postgraduate School	
PP3: Tactile Displays	Lecture Perception and
<i>FLW Salon J</i> Session Chair: Ziho Kang (University of Oklahoma)	Performance Track
Enhancing Peri-personal Navigation: A Haptic Feedback Design Approach for Vertical and Horizontal Target Search Authors: Mahdis Tajdari, Virginia Polytechnic Institute and State University; Jason Forsyth, James Madison University; Sol Lim, Virginia Polytechnic Institute and State University	
Comparing Intensity and Location-Based Tactile Change Detection Performance Author: Lauren Horde, University of Virginia	
How to Capture Attention Using Frames of Reference with Vibrotactile Information Author: Ashley Warren, Rice University	
HC6: mHealth and Telehealth	Lecture
<i>Grand Ballroom</i> Session Chairs: Victor Paquet (University at Buffalo); Karim Zahed (American University of Beirut)	Health Care Track
Remote Patient Diagnosis in Virtual Reality: Perceptions from Patients and Physicians Authors: Mustapha Unubi Momoh, University of Waterloo; Catherine Burns, University of Waterloo; Ville Mäkelä, University of Waterloo	
Simplifying a Medication Adherence App for Persons with Mild Cognitive Impairment Authors: Timothy M. Hale, University of Illinois Urbana Champaign; Teresa Star Warren, University of Illinois Urbana Champaign; Eliza Baby, University of Illinois Urbana Champaign; Renato Ferreira Leitão Azevedo, University of Illinois Urbana Champaign; James Shim, University of Illinois Urbana Champaign; Kathleen C. Insel, University of Arizona; Jeannie K. Lee, University of Arizona; Wendy A. Rogers, University of Illinois Urbana Champaign; Raksha A. Mudar, University of Illinois Urbana Champaign	
Exploring Technological Challenges in Telehealth for Allied Healthcare Practices Authors: Faiza Tazi, University of Denver; Josiah Dykstra, Designer Security; Prashanth Rajivan, University of Washington; Sanchari Das, University of Denver	

HART6: Teamwork in HART Flagstaff Session Chair: Shiwen Zhou (Arizona State University)	Lecture Human AI Robot Teaming (AI) Track
Compromise in Human-Robot Collaboration for Threat Assessment Authors: Gerald Matthews, George Mason University; Ryon Cumings, George Mason University; James Casey, George Mason University; April Rose Panganiban, U.S. Air Force Research Laboratory; Antonio Chella, University of Palermo; Arianna Pipitone, University of Palermo; Jinchao Lin, University of Central Florida; Mustapha Mouloua, University of Central Florida	
The Influence of Risk-Taking Tendency Pairing on Human-Agent Cooperative Risk Decision-Making Author: Jie Xu, Zhejiang University	
Unlocking Insights: An Interface for Understanding Dialogue Data Authors: Morgan Klaeser, University of Wisconsin – Madison; Vianney Renata, University of Wisconsin – Madison; John Lee, University of Wisconsin – Madison	
9:45-10:45 a.m.	

CI1: Children's Issues <i>FLW Salon A</i> Session Chair: Claudia MontAlvao (Pontifical Catholic University of Rio de Janeiro)	Lecture Children's Issues Track
Caregiver Adherence to Warnings Regarding Safe Shopping Cart Use Author: Kuba Glazek, Applied Safety and Ergonomics, A Rimkus Company	
Laboratory Methods for a Pilot Study of the U.S. YouthShape Survey of Child and Youth Anthropometry and Physical Capability Authors: Monica L.H. Jones, University of Michigan; Sheila M. Ebert, University of Michigan; Carl Miller, University of Michigan; Byoung-Keon D. Park, University of Michigan; Hayoung Jung, University of Michigan; Aaron Wood, University of Michigan; Leah E. Robinson, University of Michigan; Matthew P. Reed, University of Michigan	
Exploring the Application of Upper Limb Exoskeletons in Pediatric Rehabilitation: A Literature Review Authors: Pranav Meda, San Jose State University; Lin Jiang, San Jose State University; Yue Luo, San Jose State University	
S3: Nuclear FLW Salon C Session Chair(s): S Camille Peres (U.S. Nuclear Regulatory Commission)	Lecture Safety Track
The Accessible Control Room: Opportunities for Advanced Reactors Author: Ronald Boring, Idaho National Laboratory	
A Tale of Two Simulators—A Comparative Human-In-The-Loop Nuclear Power Plant Operations Study on Thermal Power Dispatch for Hydrogen Production Author: Thomas Ulrich, Idaho National Laboratory	
The Challenge of Data Integration—Digital Twin Certification to Support Remote Operations Authors: Dvlan Jurski, Idaho National Laboratory: Thomas Ulrich, Idaho National Laboratory	

PD2: Methods in Usability Evaluation	Lecture Product Design
FLW Salon D	Track
Session Chairs: Trey Roady (ChaiOne)	
User Expectations for Comfort, Discomfort and Wearability of Wrist-Worn Devices Authors: Missie Smith, Meta; Saman Madinei, Meta; Jordan Livingston, Meta; Anna Yu, Meta	
Feasibility of a Remote Contextual Diary Study on Mobile App Adoption Authors: Himalaya Patel, Indiana University; Teresa Thuemling, Indiana University; Zayn Boustani, Indiana University; Aaron Ganci, Indiana University-Purdue University Indianapolis; Richard Holden, Indiana University; Nicole Werner, Indiana University	
Design Thinking: Experimental Evidence of Ideation Strategies that Support Team Innovation Authors: Lisa Casper, Michigan Technological University; Molly Helminen, University of Michigan; Elizabeth Veinott, Michigan Technological University	
ST7: Decision-Making in Autonomous Driving Systems FLW Salon G	Lecture Surface
Session Chair(s): Mengyao Li (Georgia Institute of Technology); Myounghoon Jeon (Virginia Polytechnic Institute and State University)	Transportation Track
Understanding Reliance Decisions in Automated Vehicles Using Random Forest Analysis Authors: Xingjian Ma, University of Wisconsin – Madison; Xizi Xiao, University of Wisconsin – Madison; Ranjana Mehta, University of Wisconsin – Madison; Anthony McDonald, University of Wisconsin – Madison	
Correlation Between Traffic Locus of Control and Advanced Driver Assistance System (ADAS) Use Authors: <i>Linzhuo Wei, University of Toronto; Chelsea A. DeGuzman, University of Toronto; Birsen</i> <i>Donmez, University of Toronto</i>	
The Effects of System Confidence and Reliability on Drivers' Decision-Making in Conditionally Automated Vehicles Authors: Myeongkyu Lee, Purdue University; Brandon Pitts, Purdue University	
AC1 with XR: Augmented Cognition and XR in High-Stakes Environments	Lecture
<i>FLW Salon H</i> Session Chair: Allison Bayro (Arizona State University, University of Illinois Chicago); Jung Hyup Kim (University of Missouri)	Augmented Cognition Track Extended Reality Track
Cognitive Augmentation for Military Applications: Insights from the NATO NIAG SG-278 Study Relevant to the Human Factors Community Author: <i>Sylvain Bruni, Aptima, Inc.</i>	
Assessment of a Cognitive Workload-Adaptive Augmented Reality Training Aid for Laparoscopic Surgery	
Authors: Holden Duffie, Clemson University; Jackie Cha, Clemson University	
Investigating 24- to 48-hour Forecast of Offshore Worker Alertness and Vigilance using Multimodal Sources: A Proactive Fatigue Monitoring Paradigm Authors: David Nartey, Texas A&M University; Ranjana Mehta, University of Wisconsin – Madison	
Demonstration Session 1 FLW Salon I	Demonstration Human AI Robot Teaming (AI)
A Visual Tour Guide to Increase Users' Aesthetic Valuation of Images Authors: Hong Nguyen, The New School; Benjamin van Buren, The New School	Track Cognitive
Computational Modelling and Simulation for Verification and Validation of Concept of Operations Authors: Abhinay Paladugu, The Ohio State University; Martijn Ijtsma, The Ohio State University	Engineering & Decision Making Track

C1: Advancing Risk Communication and Team Performance	Lecture
FLW Salon J	Communications
Session Chairs: Christopher Mayhorn (North Carolina State University)	Track
Collective Anomaly Detection: A Method for Using Content-Free Communications to Predict Performance Authors: Jayci Landfair, Arizona State University; Matthew Peel, Arizona State University; Polemnia	
Amazeen, Arizona State University; Nancy Cooke, Arizona State University	
Assessing the Impact of Combining Tropical Cyclone Hazard and Forecast Path Displays on User Comprehension and Decision-Making Authors: Barbara Millet, University of Miami; Qinyu Ding, WeRide; Alberto Cairo, University of Miami; Scotney Evans, University of Miami; Sharanya Majumdar, University of Miami; Brian McNoldy, University of Miami	
Risk-Based Visualization of Hurricane Forecasts Author: Michael Schober, The New School	
HC7: Practitioner Potpourri in Healthcare I—Improving Worker and Patient Processes Grand Ballroom	Industry/ Practitioner Case Study
Session Chair: Changwon Son (Texas Tech University)	Health Care Track
Utilizing Human Factors to Improve Surgeons' Data Access Authors: Chen Zhao, Intuitive Surgical; Bridget O'Hare, Intuitive Surgical	
Muscle Fatigue Experienced by Healthcare Workers in Hemodialysis Centers: A Survey Authors: Shijing Liu, Fresenius Medical Care; Ke Liu, Fresenius Medical Care; Michelle Bayly, Michelle Bayly	
Using Human Centered Design to Decrease the Risk of Toileting in Hospitals for Patients and Clinicians	
Authors: Kate O'Neill, State University of New York at Binghamton; Dr. Stephanie Tulk Jesso, State University of New York at Binghamton; Anthony Andreano, State University of New York at Binghamton; Keelin Davie, State University of New York at Binghamton; Molly Doran, State University of New York at Binghamton	
HART7: HART Trust 3 (HART Applications)	Lecture
Flagstaff Session Chair: Shiwen Zhou (Arizona State University)	Human AI Robot Teaming (AI) Track
Human Trust and Cognitive Effort Associated with Operating a Powered Exoskeleton with Varying Levels of AutonomyAuthors: Vishwajeet Ransing, Clemson University; Benjamin Beiter, Virginia Polytechnic Institute and State University; Ananya Nagabhushana Rao, Clemson University; Alexander Leonessa, Virginia Polytechnic Institute and State University; Divya Srinivasan, Clemson University	
Effects of Automation Error Bias on Dependence and Trust in Remotely Operated Air Vehicle Operations Author: Austin Jackson, Old Dominion University	
A Case Study for Using Al Tools to Develop Training Materials for High Consequence Industries Authors: Blake Nguyen, University of Central Florida; Nathan Sonnenfeld, University of Central Florida; Fiona Duruaku, University of Central Florida; Alex Alonso, University of Central Florida; Florian Jentsch, University of Central Florida	

11:15 a.m12:15 p.m.	
AS4: Pilot Performance and Fatigue FLW Salon A Session Chairs: Arjun Rao (The Boeing Company); Katharine Sabo (Clemson University)	Lecture Aerospace Systems Track
Measuring Pilot Fatigue with ElectroOculoGraphy Authors: Gwilym Couch, Texas A&M University; Thomas Ferris, Texas A&M University; Güliz Tokadli, Collins Aerospace; Peggy Wu, RTX Technologies Research Center; Katharine Woodruff, Collins Aerospace	
Selective Sensorimotor Impairments With Mental Fatigue Associated With G-Transitions During and After Spaceflight Authors: John Hayes, Texas A&M University; Ranjana Mehta, University of Wisconsin - Madison; Blake Fairchild, Texas A&M University; Kieran Nichols, University of Wisconsin - Madison; Jeevan Jayasuriya, University of Wisconsin - Madison	
Use of a Head-Worn Display for Approach and Landing in a Transport Category Aircraft: Does Monocular Viewing Impact Pilot Performance and Workload? Authors: David Newton, Federal Aviation Administration; Eric Greenlee, Texas Tech University; Theodore Mofle, Cherokee Nation 3S; Farzaneh Shahini, Cherokee Nation 3S; Rebecca DiDomenica, Cherokee Nation 3S; Inchul Choi, Cherokee Nation 3S	
 SS7: The National Academies Board on Human-Systems Integration (BOHSI) Panel: Creating an Equitable Future of Work in an Increasingly AI-Ubiquitous Workplacw FLW Salon B Session Chairs: Frederick Oswald (Rice University); Emanuel Robinson (National Academies) 	Special Session
The National Academies Board on Human-Systems Integration (BOHSI) Panel: Creating anEquitable Future of Work in an Increasingly AI-Ubiquitous WorkplacePanelists: Linda Ng Boyle, New York University; Carolyn Sommerich, The Ohio State University; JohnD. Lee, University of Wisconsin - Madison; Tara Behrend, Michigan State University	
CEDM5: Can Human Factors Research and Development Keep Pace With Artificial Intelligence for Readiness? <i>FLW Salon C</i> Session Chair: James Pharmer (Naval Air Warfare Center Training Systems Division)	Special Session Cognitive Engineering & Decision Making Track
Can Human Factors Research & Development Keep Pace with Artificial Intelligence for Readiness? Panelists: Beth DePass, RTX BBN Technologies; Emilie Roth, Roth Cognitive Engineering; David Macannuco, Lockheed Martin; Kevin Oden, Lockheed Martin; Allen Rowe, U.S. Air Force Research Laboratory; Mark Draper, U.S. Air Force Research Laboratory	
USE4: Scientific Behavior, Cognitive Task and Agile Usability and System Evaluation FLW Salon D Session Chair: Jerry Burpee (INTUITIVE Research & Technology Corp)	Lecture Usability and System Evaluation Track
Design, Development, and Validation of a Military Orientated Re-configurable Cognitive Task Battery Authors: David John Thompson, Defence Science and Technology Laboratory; Graham Sabine, Defence Science and Technology Laboratory	
Individual Differences in Fatigued Performance Authors: Megan Morris, U.S. Air Force Research Laboratory; Garrett Swan, Aptima, Inc; Bella Veksler, TiER1 Performance Solutions	
Live or Let Die: MILSTD 1472 Type Usability Checklists in an Agile Development World Authors: Richard Steinberg, Northrop Grumman Corporation; Esther Raub, Northrop Grumman Corporation	

EDU3 With XR: Exploring XR in Education From an HF Perspective	Lecture
FLW Salon G	Education Track
Session Chair: Ziho Kang (University of Oklahoma); Benjamin van Buren (The New School)	Extended RealityTrack
Development of a Survey Instrument to Measure Educators' Preparedness for Creating Extended Reality Learning Modules Authors: Jiwon Kim, Iowa State University; Michael Dorneich, Iowa State University; Eliot Winer, Iowa	
State University; Kexin Wang, Iowa State University	
Barriers Towards the Implementation of Extended Reality (XR) Technologies to Support Education and Training in Workforce Development Programs Author: Bhargav Upadhyay, Clemson University	
Learning Scale in Virtual Reality: Experiences and Perception of Immersive Technology at a Public Middle School Authors: Karen Chen, North Carolina State University; Tyler Harper-Gampp, North Carolina State University; Linfeng Wu, North Carolina State University; Cesar Delgado, North Carolina State University; Matthew Peterson, North Carolina State University	
OE5: Tool Applications	Lecture
FLW Salon H Session Chair: Melissa Afterman (UCSF)	Occupational Ergonomics Track
ErgoReality: A Virtual Reality Simulations Software for Ergonomic Analysis of Workstation Design Authors: Christopher Morse, Amazon; Mohammad Iman Mokhlespour Esfahani, Amazon; Suresh Krishnan, Amazon	
Effectiveness and Usability of a Trunk Posture Feedback System: An Exploratory, Longitudinal	
Field Study Authors: Maury Nussbaum, Virginia Polytechnic Institute and State University; Jiwon Choi, Virginia Polytechnic Institute and State University; Sunwook Kim, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University; Ryan Porto, General Motors	
A Laboratory Evaluation of a Cooling System for a Firefighter Coat Authors: Ryan Bellacov, University of Cincinnati; Rosalyn Davis, University of Cincinnati; Kermit Davis, University of Cincinnati; Lorenna Altman, University of Cincinnati; Ashley Kubley, University of Cincinnati; Amit Bhattacharya, University of Cincinnati; Mark Schultz, University of Cincinnati; Myoung Kim, University of Cincinnati; Marepalli Rao, University of Cincinnati	
SD1: Insights in Practice: Success Stories of Applied Human Factors and Ergonomics	Discussion Panel
<i>FLW Salon I</i> Session Chair: Glenn Lematta (The MITRE Corporation)	System Development Track
Insights in Practice: Success Stories of Applied Human Factors and Ergonomics Panelists: Russel Branaghan, Research Collective; Sylvain Bruni, Aptima, Inc.; Stephen Dorton, The MITRE Corporation; Eric Holder, U.S. Army DEVCOM; Emily Patterson, The Ohio State University	
PP4: Visual Information Display and Augmented Cognition	Lecture Perception and
<i>FLW Salon J</i> Session Chairs: Maureen August (General Motors); Ashley Warren (Rice University)	Perception and Performance Track
Effects of Glass Transmittance, Font Brightness and Font Size on Text Legibility in LCD Home Appliance Interface	
Authors: Minjoon Sohn, Seoul National University; San Hong, Seoul National University; Namhee Kim, Seoul National University; Sungwoo Jeong, Seoul National University; Woojin Park, Seoul National University	
Vection and Performance During Attention-Demanding Tasks in Virtual Reality Authors: Onoise Kio, York University; Robert Allison, York University	
Efficient Highlighting of Visual Targets in Complex Natural Scenes Authors: Steffen Werner, University of Idaho; Zeth duBois, University of Idaho; Mary Hazard, University of Idaho; Nicolas LaMana, University of Idaho	

HC8: Al in Healthcare Grand Ballroom	Lecture Health Care Track
Session Chairs: Michael Boyce (U.S. Department of Veterans Affairs); Tosin Akintunde (University of Toronto)	
Al Scribes and the Future of Healthcare: A New Paradigm for Informed Consent Authors: Iman Basha, University of Waterloo; Dr. Puneet Seth, McMaster University; Dr. Catherine Burns, University of Waterloo	
Can We Predict Shoe-Floor Friction by Analyzing Amazon Reviews With ChatGPT? Authors: Gerard Aristizábal Pla, University of Pittsburgh	
The Effect of Healthcare Chatbots' Information Presentation Styles on User Acceptance in a Knowledge Seeking Task Authors: Samuel Koscelny, Clemson University; David Neyens, Clemson University	
HART8: Putting the HART in Al	Lecture
<i>Flagstaff</i> Session Chairs: <i>Xiaoyun Yin (Arizona State University)</i>	Human Al Robot Teaming (Al) Track
Exploring the Effects of Machine Learning Models of Varying Transparency on Performance Outcomes Author: <i>Krista Harris, DCS Corp.</i>	
Assessing Al Social Aptitude Using Crowd Sourced Cognitive Labels Authors: Md Fazle Elahi, Purdue University; Jiachen Jiang, Purdue University; Joshua Domeyer, Toyota Collaborative Safety Research Center; Renran Tian, North Carolina State University	
The Pop-Out Effect of Rarer Occurring Stimuli Shapes the Effectiveness of AI Explainability Authors: Pawinee Pithayarungsarit, George Mason University; Linda Onnasch, Technische Universität Berlin; Tobias Rieger, Technische Universität Berlin; Eileen Roesler, George Mason University	
1:30-2:30 p.m.	
ID2: Individual Differences in Sustained Attention, Situation Awareness and Expertise	Special Session
FLW Salon A	UX Day Individual
Session Chairs: Mustafa Demir (Texas A&M University)	Differences in
How ADHD Self-Report Scale Scores Predict Vigilance Task Performance Authors: Yazmin Diaz, University of Central Florida; Peter Hancock, University of Central Florida	Performance Track
Can Proficiency in Chess Predict Situation Awareness in a Novel Task?	

Authors: Rajan Maroju, Embry-Riddle Aeronautical University; Haroon Jamanzi, Embry-Riddle Aeronautical University; Mohammed Viqer, Embry-Riddle Aeronautical University; Dr. Andrew R. Dattel, Embry-Riddle Aeronautical University

Quantitative Analysis of Eye-gaze Metrics in Differentiating Surgical Expertise Author: *Nathan Lau, Virginia Polytechnic Institute and State University*

 SS8: President's Forum
 Special Session

 FLW Salon B
 President's Forum

 Authors: Susan Kotowski, University of Cincinnati
 Discussion Panel

 S4: Human Performance Implications of Remote Operations in High-Risk Industries
 Discussion Panel

 Lincoln West
 Session Chairs: S. Camille Peres (U.S. Nuclear Regulatory Commission); Niav Hughes Green (U.S. Nuclear Regulatory Commission)
 Discussion Panel

 Human Performance Implications of Remote Operations in High-Risk Industries
 Panelists: Robin Murphy, Texas A&M University; Steven Mallam, Memorial University of Newfoundland; Stephanie Morrow, U.S. Nuclear Regulatory Commission; Kritina Holden, Leidos; Claire Blackett, Risk
 Discussion

Pilot

USE5: Human Readiness Level, Computational Model and SGD Conversations Usability	Lecture
and System Evaluation	Usability and System
FLW Salon D Session Chair: Jerry Burpee (INTUITIVE Research & Technology Corp)	Evaluation Track
Employing a Computational Model to Reveal Stimulus-Driven Influences in Interfaces Authors: Jeremiah Still, Old Dominion University; Mary Still, Old Dominion University	
Enhancing Engagement and Interaction in Augmentative and Alternative Communication (AAC): A Comparative Study on the Impact of Front-Facing Partner Display in SGD mediated Conversations Authors: Manohar Golleru, University at Buffalo; Jeff Higginbotham, University at Buffalo; Lora Cavuoto, University at Buffalo; Pamela Mathy, University at Buffalo	
Enhancing Human-Robot Collaboration: Applying the Human Readiness Level Scale to Design Human-Centric Cobots	
Authors: Hisham Ghunaim, The Boeing Company; Derek Goetz, The Boeing Company	
ST8: Driver Behavior	Lecture
<i>FLW Salon G</i> Session Chairs: John Lenneman (Toyota Motor North America); Abhraneil Dam (Virginia Polytechnic Institute and State University)	Surface Transportation Track
Brake Response Time and the Effects of Parked and Incurring Vehicles on Driver Behavior Authors: Pamela D'Addario, MEA Forensic Engineers & Scientists; Kurt Ising, MEA Forensic Engineers & Scientists; Dr. Gunter Siegmund, MEA Forensic Engineers & Scientists	
Driving Change to Electric Vehicles: A Comprehensive Study of Charging Behaviors and User Classification Authors: Jaehoo Bae, Seoul National University; Myung Hwan Yun, Seoul National University	
Predictive Models of Brake Reaction & Steering of Police Officers in Critical Driving Situations Authors: Farzaneh Shahini, Cherokee Nation 3-S; Chihab Nadri, Texas A&M University; Maryam Zahabi, Texas A&M University	
OE6: Filling the Gap: Translate Research/Science From the Lab to the Field FLW Salon H	Discussion Panel Occupational
Session Chair: Thomas Rowell (Thomas Rowell Consulting, LLC)	Ergonomics Track
Filling The Gap: Translate Research/Science From The Lab To The Field Panelists: Mark Benden, Texas A&M University; Sheree Gibson, Ergonomics Applications; Julie Gilpin- McMinn, Spirit AeroSystems; Farzan Sasangohar, Texas A&M University	
CYB2 With A: Cyber, Privacy and Aging	Lecture
FLW Salon I	Aging Track Cybersecurity
Session Chairs: Prashanth Rajivan (University of Washington)	Track
The Missing Engineering Discipline in Cybersecurity: Human Factors Engineering Authors: Calvin Nobles, University of Maryland Global Campus; Nikki Robinson, Capitol Technology University	
Aging Safely Online: Unpacking Privacy & Security of Online Dating for Older Adults Author: Naheem Noah, University of Denver	
Usage of an Al-Based Password Tool: Impacts of Security Fatigue, Age, and Individual Differences Authors: Gerald Matthews, George Mason University; Giuseppe Ateniese, George Mason University; Daniel Barbará, George Mason University; Shawn Thayer, George Mason University; Nicholas Leskovec, George Mason University	

HPM2: Human Performance Modeling with Artificial Intelligence	Lecture
<i>FLW Salon J</i> Session Chair: Ji-Eun Kim (University of Washington)	Human Performance Modeling Track
Analyzing Worker Videos for Quantifying Motion Amounts through Computer Vision Authors: Hari Iyer, Arizona State University; Neel Macwan, Arizona State University; Shenghan Guo, Arizona State University; Heejin Jeong, Arizona State University	
Unraveling Team Dynamics: Decomposing Multilayer Networks for Insights into Joint Performance Author: Michael Tolston, U.S. Air Force Research Laboratory;	
Unveiling the Mechanisms of Diagnostic Aid Use: Cognitive Modeling Reveals Suboptimal Strategies Authors: Fernando Munoz Gomez Andrade, Oregon State University; Jason S. McCarley, Oregon State University; Megan Bartlett, University of Adelaide	
HC9: Healthcare Potpourri	Lecture
<i>Grand Ballroom</i> Session Chairs: K Raghav Bhat (Arizona State University); Adam Werner (Design Science Group, LLC)	Health Care Track
Stakeholders' Perspectives on the Adoption of Robotic-Assisted Surgery: Considerations of Human-Robot Interactions, the Built Environment, and Training Authors: Patrick Fuller, Clemson University; Jackie Cha, Clemson University	
Primary Care Screening Task Ownership: Team Coordination and Organizational Readiness for	
Implementation Authors: Reid Parks, University of Wisconsin – Madison; Madeline Moureau, Medical College of Wisconsin; Joanna Balza, Medical College of Wisconsin; Dr. Kara Gavin, Medical College of Wisconsin; Kathryn E. Flynn, Medical College of Wisconsin; Dr. Heidi Brown, Southern California Permanente Medical Group; Dr. Joan Neuner, Froedtert Health; Edmond Ramly, Indiana University, Bloomingto	
Shiftwork and Burnout Among Trauma Surgeons: A Preliminary Analysis of Trauma Surgeons' Fatigue and Stress Related to Overnight Shifts Authors: Joseph Kim, Mayo Clinic; Hamid Norasi, Mayo Clinic; Sergio Navarro, Mayo Clinic; Myung Park, Mayo Clinic; Susan Hallbeck, Mayo Clinic	
HART9: Using Artificial Intelligence in Human-AI-Robot Teaming Flagstaff	Lecture Human AI Robot Teaming (AI)
Session Chair: Eileen Roesler (George Mason University)	Track
Automating the Identification of Team-Based Leadership and Teamwork Characteristics Using LLMs Authors: Les DeBusk-Lane, Gallup; Maxim van Klinken, Gallup	
Comparing Human to Analytic Performance on Detecting and Characterizing Manipulated Media Authors: Andrew Naber, Army Research Institute for the Behavioral and Social Sciences; Laura Cassani, Aptima, Inc.; Peter Bautista, Aptima, Inc.; James Cook, Aptima, Inc.; Lauren Fortier, Aptima, Inc.; Tatiana Toumbeva, Aptima, Inc.	
Classify Mental Stress Level with Privacy-preserving Machine Learning Authors: Bingyi Su, North Carolina State University; Liwei Qing, North Carolina State University; Lu Lu, North Carolina State University; Sehee Jung, North Carolina State University; Xiaolei Fang, North Carolina State University; Xu Xu, North Carolina State University	
3:00-4:00 p.m.	
AS5: Breaking Barriers: A Spotlight on Young and Diverse Voices in Aviation Human Factors FLW Salon A Session Chair: Beth Blickensderfer (Embry-Riddle Aeronautical University)	Discussion Panel Aerospace Systems Track
Breaking Barriers: A Spotlight on Young and Diverse Voices in Aviation Human Factors Panelists: Bryan Gamelin, Honeywell Aerospace; Jayde King, U.S. Air Force Research Laboratory; Vanesa Miksa, The Boeing Company; Sabrina Woods, National Transportation Safety Board	

LBR2: Late-Breaking 2 FLW Salon B	Late Breaking Results
Session Chair: Mustafa Demir (Texas A&M University)	
A Multidimensional Accident Analysis Framework Based on Hazard Triangle and Large Language Models Authors: Dr. Souvik Das, Purdue University; Sinjana Choudhuri, Indian Institute of Technology Kharagpur; Dr. Gaurav Nanda, Purdue University;	
The Underuse of Medical Interpretation Services: A Human Factors Analysis of Why They Are Not Used Enough and How Their Usage Can Be Increased Authors: Soyun Oh, University of Toronto; Myrtede Alfred, University of Toronto; Dhruv Nayyar, Unity Health;	
Unraveling Impactful Contributors to Safety-Critical Commuting Events Authors: Dr. Charles Calderwood, Virginia Tech; Matthew C. Camden, Virginia Tech; Dr. J. Erin Mabry, Virginia Tech; Jessica Gass, Virginia Tech; Jolee A. Sloss, Virginia Tech;Lucas Kerns, Virginia Tech; Fiyinfunjah Dosumu, Virginia Tech; Brittany L. Cowan, Virginia Tech; Tarah Crowder, Virginia Tech; Yena Cho, Virginia Tech; Lorena Murro, Virginia Tech; Dr. Tanya Mitropoulos, Virginia Tech;	
Vigilance Decrement Persists Following Mental Breaks in a Signal Detection Task Authors: Tetsuya Sato, Old Dominion University; Fernando Munoz Gomez Andrade, Oregon State University; Kayla Hankey, Old Dominion University; Dr. Yusuke Yamani, Old Dominion University; Jason McCarley, Oregon State University;	
Sailors' Adaptation to Night Work with Fixed and Rotating Duty Times - First Evidence From a	
Sea Trial Authors: Dr. Stefan Röttger, Naval Institute of Maritme Medicine; Dr. Johanna Abendroth, Naval Institute of Maritme Medicine; Theresa Kohn, Naval Institute of Maritme Medicine; Thomas Jacobsen, Helmut-Schmidt-University; Dr. Panagiotis Matsangas, Naval Postgraduate School; Nita Shattuck, Naval Postgraduate School;	
Developing a Driver Monitoring System Driver Experience (DMSDX) Scale Using Insights from Developmental Psychology Authors: Dr. Dustin Souders, Clemson University; Dr. Shubham Agrawal, Clemson University	
CEDM6: Resilience	Lecture
<i>FLW Salon C</i> Session Chair: Martijn IJtsma (The Ohio State University); Abhinay Paladugu (The Ohio State University)	Cognitive Engineering & Decision Making Track
Large Language Models for Proactive Learning in Healthcare: A Comparative Study of Traditional Incident Reporting and Resilience Engineering Approaches Authors: Dixizi Liu, Clemson University; Sudeep Hegde, Clemson University; Carl Ehrett, Clemson University	
Assessment of Electric Grid Transmission System Simulator for Human Factors Research Authors: Ruixuan Li, Idaho National Laboratory; Timothy McJunkin, Idaho National Laboratory; Katya Le Blanc, Idaho National Laboratory	
Validating Measures of Team Reorganization and Interdependency in Response to Uncertainty in an Air Battle Management Task Authors: David Grimm, Georgia Institute of Technology; Jamie Gorman, Arizona State University; Gregory Funkem, U.S. Air Force Research Laboratory; Michael Tolston, U.S. Air Force Research Laboratory	
PD3: Beyond the Classroom: Unconventional UX Research Strategies That Drive Real- World Impact FLW Salon D	Discussion Panel Product Design Track
Session Chair: Rosemarie Figueroa Jacinto (Rimkus, belongIN)	
Beyond the Classroom: Unconventional UX Research Strategies that Drive Real World Impact Panelists: Christy Harper, End to End User Research; Angie Avera, Peloton Interactive; Melissa Meingast, Hewlett Packard Enterprise; Maria Natalia Russi-Vigoya, IBM; Kyrsten Novak, Amazon	

 SF1: Early-Career Insights in Human Factors Engineering Across Academia and Industry FLW Salon G Session Chair: Adam Werner (Design Science Group, LLC) Early Career Insights in Human Factors Engineering Across Academia and Industry Panelists: Madison Laskowski, Design Science Group, LLC; Qian Zhang, College of Charleston; Adam Lary, Garmin; David Illingworth, California State University, Long Beach; Zachary Guyton, Georgia Tech Research Institute; Michael Boyce, U.S. Department of Veterans Affairs; Sheila Velagapudi, Modular Medical 	Discussion Panel Student Forum Track
 OE7: Manual Material Handling FLW Salon H Session Chair: Monica Jones (University of Michigan) Data-Driven Classification of Manual Material Handling Tasks through Markerless Motion Capture Using Recurrent Neural Networks Authors: Aanuoluwapo Ojelade, University at Buffalo; Sunwook Kim, Virginia Polytechnic Institute and State University; Mohammad Sadra Rajabi, Virginia Polytechnic Institute and State University; Maury A. Nussbaum, Virginia Polytechnic Institute and State University 	Lecture Occupational Ergonomics Track
 Predicting External Hand Forces During Overhead Work: An Approach Using EMG and Random Forest Regression Authors: Mohamad Behjati Ashtiani, Virginia Polytechnic Institute and State University; Mohammadreza Freidouny, Virginia Polytechnic Institute and State University; Aanuoluwapo Ojelade, University at Buffalo; Sunwook Kim, Virginia Polytechnic Institute and State University; Maury Nussbaum, Virginia Polytechnic Institute and State University 	
Effect of Grip Location and Object Mass on Upper Body Muscle Activity While Manipulating a Table Segments Authors: Jacob Banks, Baxter International; Heather Kooiker, Baxter International; Neal Wiggermann, Baxter International	
Demonstration Session 2 FLW Salon I	Demo Training Track
Deployable Training for Treating Combat Injuries Authors: Christen Sushereba, Unveil, LLC; Laura Militello, Applied Decision Science, LLC	
NAUTICAL: Accelerating Instructional System Design With Generative Al Author: Sylvain Bruni, Aptima, Inc.	
PP5: How to Study Vigilance: Methodological Issues in the Sustained Attention Research FLW Salon J Session Chairs: Patricia DeLucia (Rice University)	Invited Symposium Perception and Performance Track
How to Study Vigilance: Methodological Issues in the Sustained Attention Research Authors: Jing Chen, Rice University; Eric Greenlee, Texas Tech University; William Helton, George Mason University; Jason McCarley, Oregon State University; Patricia DeLucia, Rice University	
 HC10: Assessing Clinician Experience: Contributions From Human Factors Grand Ballroom Session Chairs: Hanna J Barton (University of Wisconsin - Madison) Moderators: Jennifer Herout (U.S. Department of Veterans Affairs) Assessing Clinician Experience: Contributions from Human Factors 	Discussion Panel Health Care Track
Panelists: Emilie Roth, Roth Cognitive Engineering; Shawna Perry, University of Florida Jacksonville; Emily Patterson, The Ohio State University; Kelly Neville, The MITRE Corporation; Kyle Maddox, U.S. Department of Veterans Affairs	

 HART10: Ethics Considerations in Human-Machine Interaction Flagstaff Session Chairs: August Capiola (U.S. Air Force Research Laboratory) Ethics Considerations in Human-Machine Interaction Panelists: Gene Alarcon, U.S. Air Force Research Laboratory; Veljko Dubljevic, North Carolina State University; Nathan McNeese, Clemson University; Elizabeth Phillips, George Mason University 4:15-5:15 p.m. Posters With Fellows 	Discussion Panel Human AI Robot Teaming (AI) Track
McArthur Ballroom Thomas Armstrong; Deborah Boehm-Davis; Michael Byrne; Barrett Caldwell; Nancy Cooke; Kermit Davis; Pat DeLucia; Valerie Gawron; Paul Green; Peter Hancock; Karen Jacobs; Philip Kortum; William Marras; Anne McLaughlin; Ranjana Mehta; Kathleen Mosier; Robert Sugarman, et al*; Kim Vu; Chris Wickens; Yan Xiao	
5:30-6:30 p.m.	
 Poster Session 1 McArthur Ballroom Artificial Intelligence on the Digital Flight Deck: A Continuum with Parallel Trajectories Authors: Sam Holley, Embry-Riddle Aeronautical University; Mark Miller, Embry-Riddle Aeronautical University; Leila Halawi, Embry-Riddle Aeronautical University; Mark Miller, Embry-Riddle Aeronautical University; Leila Halawi, Embry-Riddle Aeronautical University Autonomous Spacecraft Motion Plan Characteristics Influence Perceived Path Appropriateness Authors: Hannah Larson, University of Michigan; Leia Stirling, University of Michigan Evaluating Head-Mounted Visual-Haptic Displays for Recovery from Unusual Flight Attitudes under Normal and Visually-Degraded Conditions Author: Sam Chin, Massachusetts Institute of Technology How Teaching Air Traffic Control College Students About Stress Improves Stress Management Authors: Andrew Dattel, Embry-Riddle Aeronautical University; Michael McCormick, Embry-Riddle Aeronautical University; Jae Beum Lee, Embry-Riddle Aeronautical University; Haroon Jamanzi, Embry-Riddle Aeronautical University; Mohammed Viger, Embry-Riddle Aeronautical University; Alexander Belluccio, Embry-Riddle Aeronautical University; Dongguang Yu, Embry-Riddle Aeronautical University; Jamie Barrett, Federal Aviation Administration Impact of Eye Fixation Classification Algorithm Thresholds on Our Ability to Accurately Interpret the Visual Scanning Patterns: A Case Study in Tower Air Traffic Control Authors: Ricardo Palma Fraga, University of Oklahoma; Ziho Kang, University of Oklahoma Impact of Eyen Westby, Iowa State University; Richard Stone, Iowa State University; Joseph Kim, Iowa State University; Colten Fales, Iowa State University; Jeremy Cermin, Iowa State University; Marcus Szamlewski, Iowa State University; Varun Srikrishnan, Iowa State University; Navigating Simulator Sickness: The Effect of Flight Maneuvers in Fixed-Base Flight Simulators Authors: Claudia Martin Ca	Poster Aerospace Systems Track Cognitive Engineering & Decision Making Track Computer Systems Track Forensics Professional Track Health Care Track Health Care Track Human Performance Modeling Track Individual Differences in Performance Track Perception and Performance Track Perception and Performance Track Product Design Track Surface Transportation Track Usability and System Evaluation Track Extended Reality Track
 8. Process-Based Trust Mediates the Effect of Mental Models on Performance in a Remote Aircraft Control Task Only Before Simulator Exposure Author: Michael Politowicz, Old Dominion University 9. System-Wide Error Attribution in Multi-Vehicle Operations: Theoretical Explanation, Implications, and Applications Authors: Elliot Biltekoff, NASA Langley Research Center; Michael Politowicz, NASA Langley Research Center; Eric Chancey, NASA Langley Research Center 10. The Effect of Complex Operations on Team Cognition Processes in Human Spaceflight Author: Andres Kaosaar, University of Central Florida 	

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11. An Operational Assessment of Team Cognition for Long Duration Space Missions	Poster
Authors: Stephen Fiore, University of Central Florida; Andres Käosaar, University of Central Florida; Travis Wiltshire, Tilburg University	Aerospace Systems Track
12. The Transferability of Pilots' Video Gaming Experience to the Skills and Situation Awareness of Operating UAVs	Cognitive Engineering & Decision Making
Authors: Dr. Andrew R. Dattel, Embry-Riddle Aeronautical University; Rochelle Potdar, Embry-Riddle Aeronautical University	Track Computer
13. An Analysis of the Effect of Risk Perception and Self-Confidence on Human Reliance on Visual Aids	Systems Track Forensics
Authors: Ethan Rabb, Purdue University; Neera Jain, Purdue University	Professional Track Health Care Track
14. Challenges and Coping Strategies of Health Practitioners During the COVID-19 Pandemic: A Comparison of Methods and Findings Authors: Negin Nazari, Clemson University; Sudeep Hegde, Clemson University; Monica Schaeubinger, Children's Hospital of Philadelphia; Ethan Larsen, Children's Hospital of Philadelphia	Human Performance Modeling Track Individual Differences in
15. Determining What's Next: A Visual Tool for Analyzing Human-Automation Coordination Authors: Abigail Post, The Ohio State University; Renske Nijveldt, The Ohio State University; David Woods, The Ohio State University; Martijn IJtsma, The Ohio State University	Performance Track Perception and
16. Dynamic Area of Interest (AOI) Matching in Simulated Environments Via a Direct Coordinate	Performance Track
Transform Approach Authors: Michael Williamson Tabango, Purdue University; Sibibalan Jeevanandam; Purdue University; Neera Jain, Purdue University	Product Design Track Surface
17. From Categorical to Dimensional: A Multifaceted Approach to Emotions Author: Areen Alsaid, University of Michigan, Dearborn	Transportation Track Usability
18. Impact of Upper-Body Motor Function on Verbal Free Recall Author: Samantha Smith, Michigan Technological University	and System Evaluation Track Extended Reality
19. Investigating the Impact of User Interface Designs on Expectations About Large Language Models' Capabilities Authors: Felix Gröner, Arizona State University; Erin K. Chiou, Arizona State University	Track
20. Public Health Decision-Making Using Uncertainty Displays Authors: Tselot Tessema, University of Toronto; Holland Vasquez, University of Toronto; Laura Rosella, University of Toronto; Birsen Donmez, University of Toronto	
21. Resilience Aware Development-Exploration: An Exercise for Improving Attention to Work Systems Resilience During Technology Design Authors: Emily Barrett, The MITRE Corporation; Kelly Neville, The MITRE Corporation; Theresa Fersch, The MITRE Corporation; Erika De Los Santos, George Mason University; Glenn Lematta, The MITRE Corporation; Tracy Sanders, The MITRE Corporation; Stephen Dorton, The MITRE Corporation; Andrew Langone, The MITRE Corporation; Emily Patterson, The Ohio State University	
22. The Tough Sell of Resilience Engineering Authors: Stephen Dorton, The MITRE Corporation	
23. All You Need is Data: A Multimodal Approach in Understanding Driver's Behavior Authors: Kelvin Kwakye, North Carolina A&T State University; Armstrong Aboah, North Dakota State University; Younho Seong, North Carolina A&T State University; Sun Yi, North Carolina A&T State University	
24. Enhancing Military Tank Training: Virtual Reality Exploration of Team Dynamics, Cognitive Load, and Physiological Responses Authors: Allison Bayro, Arizona State University; Limary Rodriguez, Arizona State University; Cayden Matherly, Arizona State University; Heejin Jeong, Arizona State University	
25. Evaluating the Slip Resistance of Various Walking Surface Contaminants Authors: Levi Dixon, Applied Cognitive Sciences; Hunter DeBusk, Mississippi State University; Ethan Fenley, Applied Cognitive Sciences	
26. Forensic Footwear: A Retrospective of the Development of the MANTIS Shoe Scanning System Authors: Braden Westby, Iowa State University	
27. A Formative Usability Study Evaluating A Decision Aid for Caregivers of Incapacitated Patients Authors: Shababa Matin, Rice University; Thaddeus Puzio, McGovern Medical School at the University	
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28. A Novel Checklist Approach to Reduce Time Under Anesthesia in Neurosurgery Authors: Asfand Khan, Embry-Riddle Aeronautical University; Aimen Farooq, AdventHealth; Wissam Elfallal, AdventHealth; Ravi Gandhi, AdventHealth; Federico Vinas, AdventHealth; Albert Boquet, Embry-Riddle Aeronautical University	Poster Aerospace Systems Track Cognitive
29. A Qualitative Evaluation of the Usability and Accessibility of Home COVID-19 Tests Among People with Disabilities Authors: Emily Gleaton, Georgia Institute of Technology; Megan Lucente, Georgia Institute of Technology; Sarah Farmer, Georgia Institute of Technology	Engineering & Decision Making Track Computer Systems Track
30. A Systems Engineering Approach to Understanding the Care Path of Hip Fracture Patients Authors: Katherina Jurewicz, Oklahoma State University; Ricky Cook, Oklahoma State University; Ainsley Kyle; Oklahoma State University	Forensics Professional Track Health Care Track Human
31. AR-based Upper Extremity Rehabilitation with Multimodal Feedback for Patients with Stroke and Parkinson's Disease: A Scoping Review Author: Md Shafiqul Islam, Virginia Polytechnic Institute and State University	Performance Modeling Track Individual
32. Assessment of the Ergonomic Exposures for Home Healthcare Workers in the United Kingdom Authors: Amour Cornelius Dondi, University of Cincinnati; Ryan Bellacov, University of Cincinnati; Dr. Michael Fray, Loughborough University; Dr. Davis Kermit, University of Cincinnati	Differences in Performance Track Perception and
33. Fall Prevention Signage Design Strategy: An Exploration Author: <i>Erin Morrissey, Main Line Health</i>	Performance Track Product Design
34. Identifying Embedded Biases in Healthcare Systems Authors: Myrtede Alfred, University of Toronto; Rupa Valdez, University of Virginia	Track Surface Transportation
35. Impacts on Assisted Living Communities During the COVID-19 Pandemic: A Longitudinal Study Authors: Aisha Khan, Indiana University, Bloomington; Reid Parks, Indiana University, Bloomington; Susan Nordman-Oliveira, University of Wisconsin – Madison; Edmond Ramly, Indiana University, Bloomington	Track Usability and System Evaluation Track Extended Reality
36. Haptic Technology for Hearing Loss: A Systematic Review of Technical Feasibility, Usability and User Experience Authors: Gabrielle Orzech, San Jose State University; Yue Luo, San Jose State University; Gaojian Huang, San Jose State University	Track
37. Midwives Usage of EMR's to Support Maternal Care Author: <i>Michelle Rogers, Drexel University</i>	
38. Modeling Sensor-Based Vigilance Decrement in the Healthcare Environment Authors: Ji-Eun Kim, University of Washington; Jiaxin Li, University of Washington; Veronika Kettel, University of Washington; Elizabeth A. Higgins, University of Washington; Chaowei Xiao, University of Washington; Younghoon Kwon, University of Washington; Michael Meno, University of Washington; Victoria Roach, University of Washington	
39. Navigating Point-of-Care Ultrasound Education: A Review of Simulation Approaches Authors: Ryan Sullivan, USF Health Morsani College of Medicine; Shannon Bailey, University of South Florida; Michael Simoes, University of South Florida	
40. NEAT: Nurse Effort Assessment Tool – Human Factors Considerations in Designing for Appropriate Staffing Authors: Michael Boyce, Yale Center for Healthcare Simulation; Leigh Evans, Yale University; Mark Sevilla, Yale New Haven Health	
41. Not Right Now: Factors Affecting Interruption Decisions in a Healthcare Paradigm Authors: Matthew Pacailler, Old Dominion University; Rachel Ball, Old Dominion University; Ballie Hirst, Old Dominion University; Mark Scerbo, Old Dominion University	
42. Sleep Management: The Use of Continuous Physiological Monitoring to Support Patient Self-Care Authors: <i>Cassandra McCormack, Purdue University; Barrett Caldwell, Purdue University</i>	
43. Systematic Root Cause Analysis of Retained Foreign Objects: A Descriptive Study of 1,371 Sentinel Events from 2010 to 2020 Using Data Analytics Author(s): Maryam Tabibzadeh, California State University, Northridge; Nitya Kumari, California State University, Northridge	
44. Systems Safety: Identifying Facilitators, Barriers and Failure Modes on a Postnatal Unit Author(s): Tosin Akintunde, University of Toronto; Nicole Hicks, University of Toronto; Kristen Tully, University of North Carolina - Chapel Hill; Myrtede Alfred, University of Toronto	

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45. The Design and Features of Text-Based Conversational Agents in Healthcare Applications: A Literature Review	Poster Aerospace
Authors: Sara Sadralashrafi, Clemson University; David Neyens, Clemson University; Yi-Ching Lee, George Mason University	Systems Track Cognitive
46. The Impact of Soundscapes on Healthcare Teams: A Literature Review Authors: Kenton Hummel, University of Nebraska Medical Center; Bethany Lowndes, University of Nebraska Medical Center; Erica Ryherd, University of Nebraska Lincoln; Victoria Kennel, University of Nebraska Medical Center	Engineering & Decision Making Track Computer Systems Track
47. The Status of Human Factors Research in Cancer Care: A Look at the Landscape Author: Sabina M. Patel, Embry-Riddle Aeronautical University	Forensics Professional Track Health Care Track
 48. To Fly or Not to Fly: A Statistical Analysis of Risks Associated With Helicopter Air Medical Evacuation Authors: Katherina Jurewicz, Oklahoma State University; Matthew Nare, Oklahoma State University; Aayush Bhattarai, Oklahoma State University; Nicoletta Fala, Oklahoma State University 	Human Performance Modeling Track Individual
49. Towards User-Centered Explainable Displays for Complex Machine Learning Models in Healthcare: A Case Study of Heart Disease Prediction Author: Joseph Nuamah, Oklahoma State University	Differences in Performance Track Perception and
50. Understanding Patient Characteristics Influencing Adherence for Remote Monitoring: Interviews with Providers	Performance Track Product Design
Authors: Dave Garrett Mitchell, Texas A&M University; Farzan Sasangohar, Texas A&M University	Track
51. Usability and Acceptance of Check-In Kiosks: An Illustration of Nimble Evaluation Methods and Recommendations for Health Kiosk Deployments Author: Yi Rong Tan, Parkview Health; Hung-Yeh Lin, Parkview Health; Rachel Pfafman, Parkview Health; Victor P. Cornet, Parkview Health	Surface Transportation Track Usability and System
52. Usability of Remote Patient Monitoring and Telemonitoring Systems: A Literature Review Authors: Karim Zahed, American University of Beirut; Changwon Son, Texas Tech University; Armina Mim, Texas Tech University; Omar Itani, American University of Beirut	Evaluation Track Extended Reality Track
53. Using the SEIPS Model to Assess a Maternal Hemorrhage Risk Alert Tool Authors: Kaitlyn L. Hale-Lopez, University of Illinois Urbana-Champaign; William F. Bond, University of Illinois College of Medicine; Jonathan Handler, Clinical Intelligence Lab of OSF Healthcare; Neelam Verma, University of Illinois; Shruti Chakravarthy, University of Illinois; Rebecca Ebert-Allen, University of Illinois College of Medicine; Abigail R. Wooldridge, University of Illinois Urbana-Champaign	
54. Virtual Reality Learning: Design Concepts of a Virtual Reality Piano to Address Injuries and Increase Learning Performance Author: <i>Ziho Kang, University of Oklahoma</i>	
55. A Cluster Analysis of Heart Rate Variability in an Alarm Monitoring Task to Quantify Vigilance Performance Author: Katherina Jurewicz, Oklahoma State University; Jimmy Uba, Oklahoma State University	
56. Distributed Space Team Coordination: An Agent-based Modeling and Simulation Approach Authors: Xiaoyun Yin, Arizona State University; Elmira Zahmat Doost, Arizona State University; Jamie Gorman, Arizona State University	
57. Exploring the Influence of Automation and Feedback on Multitasking Performance Authors: Dr. Ji-Eun Kim, University of Washington; Zishu Ling, University of Washington; Wenxin Xiao, University of Washington	
58. Human Performance Modeling Architecture with HC-130J Mission Application Author(s) : Stephanie Slimp, Air Force Institute of Technology; Michael Miller, Air Force Institute of Technology	
59. Identification of Cognitive Control Modes via Physiological Detection Author(s): Jason Ralph, Naval Undersea Warfare Center; Shannon Flynn, Naval Undersea Warfare Center	
60. Modeling Microtasks for Digital Nuclear Power Plant Control Room Interfaces Author(s): Ekim Koca, University of Virginia	
61. Post-Power Law of Practice: Comparing Newer Models of Human Learning Author(s): Charles Weeks, Rice University; Michael Byrne, Rice University	

62. Speed-Accuracy Tradeoff (SAT) and Speed-Confidence Tradeoff (SCT) in a Human-Robot	Poster
Interaction (HRI) Task Yili Liu, University of Michigan; Yuanchen Wang, University of Michigan; X. Jessie Yang, University	Aerospace Systems Track
of Michigan 63. Towards a Modular Team Dynamics Measurement framework using Hybrid Cognitive Task Analysis, Perturbation Training, and Dynamic Metrics of Team Cognition Authors: Kamala Avancha, Arizona State University; Parkhi Malhotra, Arizona State University; Jamie Gorman, Arizona State University; Vipin Verma, Arizona State University; Robert Likamwa, Arizona State University; Kevin Gary, Arizona State University; Randall Spain, U.S. Army DEVCOM Soldier Center, Simulation and Training Technology Center; Benjamin Goldberg, U.S. Army DEVCOM Soldier Center, Simulation and Training Technology Center; Scotty Craig, Arizona State University	Cognitive Engineering & Decision Making Track Computer Systems Track Forensics Professional Track Health Care Track
65. Al in VR for Blind and Low-Vision Individuals: Literature Review Authors: Tianhang Liu, Arizona State University; Pooyan Fazli, Arizona State University; Heejin Jeong, ArizonaState University	Human Performance Modeling Track Individual
66. Associations Among Social Contexts of Hybrid Work and Stress States: Implications for Supporting Worker Performance Authors: Madeline Parga, University of Southern California; Shawn Roll, University of Southern California; Burcin Becerik-Gerber, University of Southern California; Gale Lucas, University of Southern California; Shrikanth Narayanan, University of Southern California	Differences in Performance Track Perception and Performance Track
67. Examining Vigilance Through Social Facilitation and Extraversion Authors: Jazmyn Donovan, University of Central Florida	Product Design Track Surface
68. Impacts of Bad Digital Habits on Life Satisfaction in College Students and Early Career Professionals	Transportation Track Usability
Authors: Yesh Chala, Arizona State University; Heather Lum, Arizona State University	and System
69. Individual Differences in Stride Length During Powdered Exoskeleton Walking Due to Changes in Quasi-Stiffness Control Parameter Authors: Savannah Maples, Auburn University; Yadrianna Acosta-Sojo, Auburn University	Evaluation Track Extended Reality Track
70. Using Neural Data to Classify Workload: A Refresh of the SynWin Task Battery Authors: Olivia Fox Cotton, Aptima, Inc; Lisa Lucia, Aptima, Inc.; Justin Morgan, Aptima, Inc.; Jordan Coker, Aptima, Inc.; Matthew Ewer, Aptima, Inc.; Joseph Geeseman, U.S. Navy	
71. Adaptive Clothing for People with Spinal Cord Injury in Activities of Daily Living, Occupational Management, and Sports Authors: Yujin Hong, Seoul National University; Woojin Cho, Seoul National University; Junseok Park, Seoul National University; Myunghwan Yun, Seoul National University	
72. Designing Map Features for Color Vision Deficiency (CVD) Usability Authors: Thao Pham, Pacific Science & Engineering Group; Alexander Boone, Pacific Science & Engineering Group; Dirk Beer, Pacific Science & Engineering Group	
73. Empowering Teachers as Users in Human-Centered Design Authors: Rezwana Islam, Arizona State University; Heather Lum, Arizona State University	
74. Out of The Box, Onto the Screen: Insights from an OOBE Study of the Xbox Adaptive Controller Author(s): Carmen Van Ommen, Embry-Riddle Aeronautical University; Corey Walton, Embry-Riddle Aeronautical University; Amanda Dhanpaul, Embry-Riddle Aeronautical University; Isabella Curtorillo, Embry-Riddle Aeronautical University; Barbara Chaparro, Embry-Riddle Aeronautical University	
75. User-Centered Social Interaction Design in Intelligent Personal Assistants and Social Robots Author(s): Fernando Montalvo, Jacobs Space Operations Group; Phuoc Thai, University of Central Florida; Promise Stephens, Jacobs Space Operations Group; Jordan Sasser, University of Central Florida; Sean Hinkle, University of Central Florida	
76. A Review of Human Factors Research on People Who Crochet Author(s): Nell Jaskowiak, Iowa State University	
77. Discovering Eye Movement Metrics to Identify Optimal Gaze Velocity Threshold Values for the I-VT Eye Fixation Detection Algorithm Author(s): Ricardo Palma Fraga, University of Oklahoma; Ziho Kang, University of Oklahoma	
78. Emotion and Text: How to Deliver Human Emotion through the Text Features Author(s): Dasol Han, University of Michigan, Dearborn; Wonji Doh, University of Michigan, Dearborn; Sang-Hwan Kim, University of Michigan, Dearborn	

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79. Investigating Stochastic Resonance in Tactile Discrimination	Poster
Authors: Jayashri Prakash, Rice University; Patricia R. DeLucia, Rice University	Aerospace Systems Track
80. Performance Differences for Switching Sensory Modalities in Degraded Audio Environments Authors: Denis Kozhokar, Meta; Missie Smith, Meta; Brian Simpson, Meta; Monica Sewell, Meta; Krista Taylor, Meta	Cognitive Engineering & Decision Making Track
81. Predicting Scam Detection Performance on Social Media using Eye Tracking Authors: Tomas Lapnas, George Mason University; Matthew Peterson, George Mason University; Hemant Purohit, George Mason University; Géraldine Walther, George Mason University; Yoosun Chung, George Mason University; Anuridhi Gupta, George Mason University; Hannah Choi, George Mason University	Computer Systems Track Forensics Professional Trac Health Care Tracl
82. Replicating Visuo-Motor Remapping in the Laparoscopic Environment Authors: Bradford Howe, Texas Tech University; Martina I. Klein, Texas Tech University; Zachary Turkowski, Texas Tech University; Ameer Yadak, Texas Tech University; Mesoma Iloanusi, Texas Tech University; Alexander G. Brito, Texas Tech University; Chris Monico, Texas Tech University	Human Performance Modeling Track Individual Differences in
83. The Effects of Voice Features in Voice Assistant Systems on Human Perceived Emotion Authors: Nishanth Prabhu Kurunthachalam, University of Michigan, Dearborn; Sang-Hwan Kim, University of Michigan, Dearborn	Performance Track Perception and
84. The Impact of Eccentricity within Visual Vigilance Displays Authors: Chidera Azubike, Texas Tech University; Emily Maw, Georgia Tech Research Institute; Eric Greenlee, Texas Tech University	Performance Track Product Design Track
85. Verbal Tasks for Multiple Modalities: A Literature Review Authors: Krista Taylor, Meta; Denis Kozhokar, Meta; Missie Smith, Meta	Surface Transportation Track
86. Visual Fatigue While Reading on a Computer Screen at Different Contrast Levels: An Eye-tracking Study Authors: Dylan Hewitt, North Carolina State University; Yingchen He, North Carolina State University	Usability and System Evaluation Track Extended Reality
87. When Should Feedback Be Given for Autonomous System Updates? An Examination Across Two Update Patterns Authors: Youyu Sheng, The Hong Kong University of Science and Technology (Guangzhou); Dengbo He, The Hong Kong University of Science and Technology (Guangzhou); Jingyu Zhang, Chinese Academy of Sciences	Track
88. Behavioral Tendencies of Blind and Vision-Impaired Travelers that are Prone to Falls from the Edges of Station Platforms Author: Hisato Ohno, Railway Technical Research Institute	
89. Development of a Systems Safety Program for a Large Healthcare System Author: Helen Fuller, Veterans Health Administration	
90. Does Prosocial Automation Increase Driver's Well-Being? Author(s): Shashank Mehrotra, Honda Research Institute USA; Kumar Akash, Honda Research Institute USA; Teruhisa Misu, Honda Research Institute USA; John Lee; University of Wisconsin – Madison; SooYeon Kim, University of Wisconsin – Madison	
91. Human-Al Interaction for Safety and Security: Is Generative Al a Bliss or a Menace? Author(s): Dr. Changwon Son, Texas Tech University	
92. Leveraging AI to Improve Task-specific Biomechanical Safety in Work Instruction Author(s): Gregory Rawlings, Acadisium; Fernando Montalvo, Jacobs Space Operations Group; Yash Mehta, Florida Institute of Technology; Itzel Guillen, Vanderlande Industries; Promise Stephens, Jacobs Space Operations Group; Phuoc Thai, University of Central Florida	
93. Smart All-Hazard Responses Framework (SARF): Human Factors and Ergonomics Approach Author(s): Dr. Junho Park, Santa Clara University	
94. An Information Theoretic Approach to Understanding the Information Gain During Laparoscopic Motor Skill Training Author(s): Matthew Ball, Clemson University; Jackie Cha, Clemson University	

95. Eliciting Requirements & Recommendations for Training Macrocognition in Teams: Considerations for Collaborative Problem Solving Authors: Nathan Sonnenfeld, University of Central Florida; Blake Nguyen, University of Central Florida; Giovani Diaz Alfaro, University of Central Florida; Vera Daniliv, University of Central Florida; Olivia Newton, University of Central Florida; Florian Jentsch, University of Central Florida; Stephen Fiore, University of Central Florida	Poster Aerospace Systems Track Cognitive Engineering & Decision Making Track
96. Navigating Cognitive Demand in Virtual Reality: Implications for Education and Training Author: <i>Gregory McGowin, University of Central Florida</i>	Computer Systems Track
97. Mind the Gap! Advancing Immersion in Virtual Reality—Technological Factors, Measurement, and Research Opportunities Author: <i>Gregory McGowin, University of Central Florida</i>	Forensics Professional Track Health Care Track
98. Enhancing Aviation Safety through User-Centric Design: The Evolution of FAA's ASAIC Toolkit Within the Systems Safety Management Transformation Effort Authors: Dr. Jessica Cruit, Astrion; Chris Andrzejczak, Astrion; Dereck Wilson, Federal Aviation Administration	Human Performance Modeling Track Individual Differences in Performance
99. Play Speed and Experience Impacts Visual Behaviors During Clone Hero Gameplay Authors: Shawn Akridge, George Mason University; Matt Peterson, George Mason University	Track Perception and Performance
100. Psychological Fidelity: A Systematic Review to Support Simulation-Based Training Authors: Andy C. Silva, University of Central Florida; Olivia B. Newton, University of Central Florida	Track Product Design
101. Toward Real-Time Intervention for Enhancing Multitasking Performance: A Scoping Review Authors: Ji-Eun Kim, University of Washington102. Explaining How to Interpret a Usability Survey May Enhance Reliability Without Negatively Influencing Responses Authors: Ian Robertson, Rice University; Xiaoxuan "Alicia" Cheng, Rice University; Philip Kortum, Rice University	Track Surface Transportation Track Usability and System
102. Best of Both Worlds: Using the Performance Operating Characteristic to Assess Dual-Task Performancewith Vehicle Automation Author: Jahinaya Parker, University of Wisconsin – Madison	Evaluation Track Extended Reality Track
103. Experiences and Perspectives on Living in a Networked Home: Evaluating Feedback from a Smart Home Kit Field Study Authors: Shabnam FakhrHosseini, Massachusetts Institute of Technology; Chaiwoo Lee, Massachusetts Institute of Technology; Sheng-hung Lee, Massachusetts Institute of Technology; Lauren Cerino, Massachusetts Instituteof Technology; Joseph Coughlin, Massachusetts Institute of Technology	
104. Explaining How to Interpret a Usability Survey May Enhance Reliability Without Negatively Influencing Responses Authors: Ian Robertson, Rice University; Xiaoxuan "Alicia" Cheng, Rice University; Philip Kortum, Rice University	
105. Measuring Intuitiveness: Expected and Experienced Fluency Authors: Mary Still, Old Dominion University; Mary Rust, Old Dominion University	
106. Oculomotor Predictors of Usability: Visual Search Guidance and Target Verification Author(s): Steven Ford, University of Central Florida	
107. Reducing the Barriers to Neuroergonomic and Psychophysiological Research Through Usability Author: Steven Ford, University of Central Florida	
108. One Game, Multiple Platforms: Enhancing Usability and Accessibility in Dead by Daylight (DBD) Author(s): <i>Elizabeth Codick, University of Central Florida</i>	
109. The Use of Eye-tracking Technology to Measure Cognitive-Behavioral Processes During IV Medication Administration Author(s): Jeannine Blake, University of Massachusetts, Amherst	
110. Usability Assessment of openEMR: Enhancing Healthcare Interactions Author(s): Abdelrahman M. Mahmoud, University of Louisville; Jason J. Saleem, University of Louisville	
111. Usability of an Active Hand Grip Strength Industrial Exoskeleton: A Heuristic Evaluation Author(s): Alejandra Martinez Fernandez, University of Texas at El Paso; Laura Tovar, University of Texas at El Paso; Carla Irigoyen Amparan, University of Texas at El Paso; Karen Gonzalez, University of Texas at El Paso; Prajina Edayath, University of Texas at El Paso; Priyadarshini Pennathur, University of Texas at El Paso; Arunkumar Pennathur, University of Texas at El Paso	

112. User Experience of Voice-Powered Technologies by People with Visual Disabilities	Poster
Author(s): Hyung Nam Kim, North Carolina A&T State University	Aerospace
113. User-Centered Design of Neuropsychological eHealth Interventions Authors: Andrea Lefebre-Rivera, University of Central Florida; Promise Stephens, Jacobs Space Operations Group; Jasmine Martinez-Robitzsch, University of Central Florida; Phuoc Thai, University of Central Florida; Fernando Montalvo, Jacobs Space Operations Group	Systems Track Cognitive Engineering & Decision Making Track
114. Augmented Reality in Extra-Vehicular Activities: Optimizing Alert Detection and Cognitive Workload	Computer Systems Track
Authors: Melissa Cloutier, Rice University; Shrreya Aagarwal, Rice University; Yining Zhang, Rice	Forensics Professional Trac
University; Jasmine M. Manansala, Georgia Institute of Technology; Michelle Zheng, Rice University; Daniel H. Kuo, Rice University; Benjamin Rubin, Rice University; Chloe S. Park, Rice University; Mert	Health Care Trac
Culcu, Rice University; Justin Lee, Rice University	Human Performance
115. Effect of Active Virtual Reality Experience on the Memory and Emotion of an Indirect Exposure	Modeling Track
to an Adverse Event Authors: Mohammad Jamshidzadeh, Texas Tech University; Killian Parker, Texas Tech University; Changwon Son, Texas Tech University	Individual Differences in Performance Track
116. Familiarization Training Game for Virtual Reality Spacesuit User Interface Authors: Maggie Schoonover, Wichita State University; Ryan Z. Amick, KBR/NASA	Perception and Performance Track
117. Impact of Immersion in Virtual Reality (VR) and Desktop Environments on Spatial Ability Authors: Heather Lum, Arizona State University; Jessica Lee, Arizona State University; Selena Evans,	Product Design Track
Arizona State University; Yue Liu, Arizona State University; Taylor Kampf, Arizona State University	Surface Transportation
118. Improving Learning and Performance in Assembly Operations: A Comparative Study of VR, AR,	Track
and Paper-Based Instructions Author: Md Abdullah, The University of Texas at Arlington	Usability and System
	Evaluation Trac
119. Virtual Reality and Depth Cues: Are Women at a Disadvantage? Authors: Rachel Benton, North Carolina State University; Anne Collins McLaughlin, North Carolina State University; Andrea Macedo Salas, North Carolina State University	Extended Realit Track
THURSDAY, SEPTEMBER 12	

Industry/

Practitioner

Case Study Lecture

Aerospace

Usability

and System

Systems Track

Evaluation Track

All Day

University Lab Posters

McArthur Foyer

Adaptive Cognitive Systems Laboratory at Iowa State University; Autonomy & Robotics for Collaborative Systems Lab; The University of Tennessee, Knoxville; Center for Ergonomics Labs at the University of Michigan; Center for Human, AI, and Robot Teaming (CHART) at Arizona State University; Design & Implementation Sciences Program, Health & Wellness Design Department, Indiana University School of Public Health Bloomington; Engineering for Democracy Institute, University of Rhode Island; GMU Human Factors & Applied Cognition Program; Human Factors & Applied Statistics Lab - University of Toronto; Human Factors and Ergonomics Program at the University of Wisconsin Madison; Human Factors Labs at Embry-Riddle Aeronautical University; Human Factors Research Facilities at California State University, Long Beach; Human Factors Safety Lab (HFSL), University of Minnesota; Human Optimization Modelling Lab (HOMLab), University of Waterloo; Human Systems Engineering Laboratories at Arizona State University; Humans and Technology Laboratory (HATLab); Michigan Tech; NeuroErgonomics Lab at University of Wisconsin Madison; Occupational Safety, Ergonomics and Injury Prevention Center at Auburn University; Purdue University; Rice University; Sawyer Laboratories, University of Central Florida; SHARE Lab, Texas Tech University; The Challenge Metacognition and Perception (ChaMP) Lab at The University of Alabama in Huntsville; The Cognitive Performance Lab at Oklahoma State University; University of Central Florida; University of Virginia; University of Washington; Virginia Polytechnic Institute and State University; Virtual and Augmented Reality Laboratory at North Carolina State University

8:30-9:30 a.m.	
PD4: Circularity Driven Product Design for Recycling, Refurbishment, Reuse and Lowering Carbon Footprints <i>FLW Salon A</i> Session Chair: David Rempel (UC Berkeley)	Discussion Panel Product Design Track Sustainability Track
Circularity Driven Product Design for Recycling, Refurbishment, Reuse and Lowering Carbon Footprints Panelists : Christopher Reid, The Boeing Company; Kathryn Tippey, Philips; Amrita Maguire, Dell Technologies	
 CEDM7: Cognitive Systems Engineering Issues in the Design of Machine Learning Systems FLW Salon C Session Chair: Samantha Krening (The Ohio State University) Cognitive Systems Engineering Issues in the Design of Machine Learning Systems Panelist: Philip Smith, The Ohio State University; Mica Endsley, SA Technologies; Joseph Lyons, Wright- Patterson AFB; John Lee, University of Wisconsin – Madison; Emilie Roth, Roth Cognitive Engineering 	Discussion Panel Cognitive Engineering & Decision Making Track
 AS6: Accident Analysis FLW Salon D Session Chair: Shraddha Swaroop (California State University, Long Beach) Factors that Affect Pilot Response Times to Alerts: Findings from a Literature Review and ASRS Reports Authors: Kelene Fercho, Federal Aviation Administration; Dennis Beringer, Cherokee Nation 3-S; Colleen Donovan, Federal Aviation Administration Cognitive Biases in Commercial Aviation: Empirical Review of Accident Reports Authors: Chihab Nadri, Texas A&M University; Jordan Regalado, Texas A&M University; Thomas Ferris, Texas A&M University; Maryam Zahabi, Texas A&M University 	Lecture Aerospace Systems Track
 ST9: Driver and Remote Operator Cognition FLW Salon G Session Chairs: Gaojian Huang (San Jose State University); Aries Chu (San Jose State University) A Novel Experiment Design for Studying Multiple Cognitive Factors in Conditionally Automated Driving Contexts Authors: Sibibalan Jeevanandam, Purdue University; Michael Williamson Tabango, Purdue University; Xipeng Wang, Purdue University; Neera Jain, Purdue University Differentiating High Cognitive Load and Drowsiness Using Driver Performance and Physiology Authors: Suzan Ayas, University of Toronto; Dengbo He, The Hong Kong University of Science and Technology; Birsen Donmez, University of Toronto Understanding the Workload of Remote Truck Operators with Discrete Event Simulation Authors: Xingjian Ma, University of Wisconsin – Madison; Vanik Zakarian, University of Wisconsin – Madison; Anthony McDonald, University of Wisconsin – Madison 	Lecture Surface Transportation Track

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OE8: Crab Studies and Ballot Opening FLW Salon H Session Chair: Joel Haight (University of Pittsburgh); Peiran Liu (Purdue University)	Lecture Occupational Ergonomics Track
Session Chair. Soer haight (Oniversity of Fittsbargh), Feiran Ela (Farade Oniversity)	
Toward Safer Crab Harvesting Environment: Sorting Table Height and Low Back Biomechanical Load During Crab Sorting Authors: Mina Salehi Sedeh, Oregon State University; Kinana Kia, Oregon State University; Allen	
Chan, Oregon State University; Matthew Agnew, Oregon State University; Seobin Choi, Oregon State University; Laurel Kincl, Oregon State University; Jeong Ho Kim, Oregon State University	
Effects of Different Mechanized Winch Swing Directions on Low Back Load During Crab Pot Hauling Authors: Kiana Kia, Oregon State University; Allen Chan, Oregon State University; Mina Salehi Sedeh, Oregon State University; Matthew Agnew, Oregon State University; Laurel Kincl, Oregon State University; Jay Kim, Oregon State University	
Explorating Process Performance of Envelope Opening and Ballot Extraction Options in Vote-by- Mail: A Utah Case Study	
Authors: Leonie S. Otte, University of Rhode Island; Gretchen A. Macht, University of Rhode Island	
PP6: Perception and Performance in Driving FLW Salon I	Lecture Perception and
Session Chairs: Jason McCarley (Oregon State University), Srijani Mukherjee (Member)	Performance Track
Human Factors Engineering (HFE) Considerations for Mounting Internal Interfaces in Industry Vehicles	
Authors: Sean Bumgarner, Colorado State University; Sarah Rudder, Colorado State University; Erika Gallegos, Colorado State University	
Design of Multimodal In-Vehicle Notifications at Highway-Rail Grade Crossings: A Perception Study Authors: Abhraneil Dam, Virginia Polytechnic Institute and State University; Henry Ro, Virginia Polytechnic Institute and State University; Samantha Walker, Michigan Technological University; Gayoung Ban, Virginia Polytechnic Institute and State University; Pasi Lautala, Michigan Technological University; Elizabeth Veinott, Michigan Technological University; Myounghoon Jeon, Virginia Polytechnic Institute and State University	
Investigating the Effects of Binaural Beats on Driver's Drowsiness Authors: Jing Zang, Purdue University; Chiho Lim, Purdue University; Carsten Starke, Ford Motor Company; Mansoor Nasir, Ford Motor Company; Ksenia Kozak, Ford Motor Company; Denny Yu, Purdue University; Brandon Pitts, Purdue University	
HC11: Patient Safety and Quality in Healthcare II Grand Ballroom	Lecture Health Care Track
Session Chair: Hanna J Barton (University of Wisconsin - Madison)	
Patient Perceived Quality of Outpatient and Inpatient Care Between General and Specialized Hospitals Authors: Qian Lin, The University of Hong Kong; Calvin Or, The University of Hong Kong; Dan Zhang, T singhua University	
Evaluating the Safety and Quality of Intraoperative Anesthesia Handoffs Authors: Mojgan Zoaktafi, University of Illinois at Urbana-Champaign; Michael W. Russell, West Virginia University School of Medicine; Ankit Bansal, State University of New York-Binghamton; Osman Ozaltin, North Carolina State University; Abigail R. Wooldridge, University of Illinois at Urbana-Champaign	
Beyond Anecdotes: Quantifying the Baseline Prevalence of Phantom Alarms in Healthcare Authors: <i>Elizabeth Galinsky, Corewell Health; Megan McCray, Corewell Health</i>	

HART11: Physiology, Fatigue and Human-Al-Robot Teaming Flagstaff Session Chair: Nicole Rote (University of Colorado, Boulder) Multimodal Physiological Models of Situation Awareness Authors: Kieran Smith, University of Colorado Boulder; Tristan Endsley, Draper; Torin Clark, University of Colorado	Lecture Human AI Robot Teaming (AI) Track
Human-Robot Interactions Under Fatigue During an Overnight sUAS Disaster Response Exercise Authors: Aakash Yadav, University of Wisconsin – Madison; Gracie Woodland, Texas A&M University; Ranjana Mehta, University of Wisconsin – Madison; Dr. S. Camille Peres, U.S. Nuclear Regulatory Commission; Tom Mazini, Texas A&M University; Robin Murphy, Texas A&M University	
Inter-Brain Synchrony Signals Shifts in Multi-Human Robot Team Dynamics Amidst Uncertainties Authors: Aakash Yadav, University of Wisconsin – Madison; Ranjana Mehta, University of Wisconsin – Madison	

9:45-10:45 a.m.	
XR5: Enhancing Learning in Extended Reality FLW Salon A Session Chair: Md Abdullah (The University of Texas at Arlington); Ronak Ranjitkumar Mohanty (University of Wisconsin - Madison)	Lecture Extended Reality Track
Effects of Self-Learning and Exploration for XR-based Interactions Authors: Yalda Ghasemi, University of Illinois Chicago; Debaleen Chattopadhyay, University of Illinois Chicago; Heejin Jeong, Arizona State University; Hyungil Kim, University of Illinois Chicago; Jida Huang, University of Illinois Chicago	
Downloading Creativity Mods: Improving Our Problem-Solving Skill Transfer Authors: Kaitlyn Roose, Michigan Technological University; Jasmine Estes, Grand Valley State University; Kenzie Baker, Michigan Technological University; Elizabeth Veinott, Michigan Technological University	
A2: Conscious Aging in Place FLW Salon B Session Chair: Boyi Hu (University of Florida)	Lecture Aging Track
Aging in a Smart Home? The Oldest Olds' Attitudes Toward Technology for Aging-in-Place Authors: Lauren Cerino, Massachusetts Institute of Technology; Sophia Ashebir, Massachusetts Institute of Technology; Taylor Patskanick, Massachusetts Institute of Technology; Shabnam FakhrHosseini, Massachusetts Institute of Technology; Lisa D'Ambrosio, Massachusetts Institute of Technology; Joseph Coughlin, Massachusetts Institute of Technology	
Designing, Implementing, and Testing Decision Support for a Digital Therapeutic System to Improve Medication Adherence for Older Adults Author: Jeannie K. Lee, University of Arizona	
Exploring Longitudinal Physiological Monitoring: Insights from Utilizing a Commercial Wearable Device Among Older Adults with Mild Cognitive Impairment Authors: Emily Gleaton, Georgia Institute of Technology; Emily Parcell, Georgia Institute of Technology; Jenny Erickson, Georgia Institute of Technology; Bradley Fain, Georgia Institute of Technology	

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CEDM8: Distributed Work 1 FLW Salon C Session Chair: Richard Stone (Iowa State University)	Lecture Cognitive Engineering & Decision Making
Automating the Analysis of Dialogue Acts in Teams to Understand Distributed Sensemaking Authors: Christopher Baber, University of Birmingham; Andrew Leggatt, Trimetis; George Raywood- Burke, Trimetis; Simon Attfield, Trimetis; Huw Gibson, Trimetis; Donna Amey, Defence Science and Technology Laboratory	Track
Eyes on the Mission: Eye-Tracker-Enabled Real-Time Decision Support System in a Simulated Remotely Piloted Aircraft Task Environment Authors: Farzan Sasangohar, Texas A&M University; Hyun-Gee Jei, Texas A&M University; Mustafa Demir, Texas A&M University	
Interface Design and Evaluation to Support Transfer of Tactical Control (ToTC) in Distributed Teams Author: Hunter Oldham, U.S. Air Force Research Laboratory	
SS10: HFES Technical Standards Update FLW Salon D	Special Session
Moderators: Robert Fox, University of Michigan; Rammohan Maikala, National Safety Council	
An Update on the Human Factors and Ergonomics Standards Work Panelists: Peregrin Spielholz, The Boeing Company; Robert Fox, University of Michigan; Amrita Maguire, Dell Technologies; Chris Reid, The Boeing Company; Shin'ichi Fukuzumi, RIKEN Center	
ST10: Vehicle Interfaces, Displays and Warnings—Part 1 FLW Salon G	Lecture Surface Transportation
Session Chairs: Victor Paquet (University at Buffalo); Myeongkyu Lee (Purdue University)	Track
Impacts of Non-Driving-Related Task Interface Design on Time Changes of Motion Sickness Severity and Task Performance During Fully Autonomous Driving Authors: Woojin Park, Seoul National University; Sungmin Kim, Seoul National University	
The Impact of Meaningful Vibrotactile Displays on User Preferences Across Age Groups in Automated Driving Authors: Zhi Zhang, San Jose State University; Wei-Hsiang Lo, San Jose State University; Gaojian Huang, San Jose State University	
Impacts of Infrastructure-Assisted In-Vehicle Warning on Driving Behavior and Eye Movement at Roundabouts	
Authors: Tianfang Han, University of Idaho; Cong Zhang, Purdue University; Chi Tian, Purdue University; Hang Li, Purdue University; Yiheng Feng, Purdue University; Yunfeng Chen, Purdue University; Jiansong Zhang, Purdue University	
USE6: Sleep Tracking, QR Codes and Large Language Usability and System Evaluation FLW Salon H	Lecture Usability
Session Chair: Judi See (Sandia National Laboratories)	and System Evaluation Track
The Impact and Potential of QR Codes in Healthcare: a Comprehensive Review Authors: Pratyusha Joshi, Mumbai University; Sahil Sawant, Mumbai University	
Participant Compliance When Wearing a Sleep-Tracking Ring for Extended Time Periods: Preliminary Results Authors: Nita Shattuck, Naval Postgraduate School; Panagiotis Matsangas, Naval Postgraduate School; Christopher McClernon, Naval Postgraduate School	
The Influence of Task and Group Disparities over Users' Attitudes Toward Using Large Language Models for Psychotherapy Authors: Qihang He, Sichuan University; Jiyao Wang, The Hong Kong University of Science and Technology (Guangzhou); Dengbo He, The Hong Kong University of Science and Technology (Guangzhou)	

T4: Toward Effective Safety Training <i>FLW Salon I</i> Session Chairs: <i>Megan Morris (U.S. Air Force Research Laboratory)</i>	Lecture Training Track
Relationship Between Arousal and Technical Performance in the Oil & Gas Sector: An Investigation Using a Simulated Well Control Scenario Authors: Leonardo Bori, University of Modena and Reggio Emilia; Sandro Rubichi, University of Modena and Reggio Emilia; Cristina Iani, University of Modena and Reggio Emilia	
Investigating Knowledge Gain and User Satisfaction in UAS Safety Modules: A Pilot Study Authors: Kamala Avancha, Arizona State University; Savannah Bradley, Arizona State University; Hari Iyer, Arizona State University; Stephanie Becerra, Arizona State University; Scotty Craig, Arizona State University	
Firearm Safety Dimensions, an Extension of the Military Safety Climate Questionnaire Author: Martin Schüler, Swedish Defence University	
HC12: Practitioner Potpourri—AI, Usability and Demonstrating Value in Healthcare Grand Ballroom Session Chairs: Casey Kovesdi (Idaho National Laboratory); Steven Foster (Clemson University)	Industry/ Practitioner Case Study Lecture Health Care
Does Artificial Intelligence Change How We Design User Interfaces? A Case Study From Representatives in the Medical Device Industry Authors: Judith Tiferes, Boston Scientific; Mi Zhou, Boston Scientific	
Mixed Methods Approach to Assessing Usability of a Self-Monitoring Program Designed for Veterans with Obstructive Sleep Apnea on Non-PAP Therapy Authors: Selene Mak, VA Greater Los Angeles Healthcare System; Sara Ghadimi, University of California Los Angeles; Erin Der-McLeod, VA Greater Los Angeles Geriatric Research Education and Clinical Center (GRECC); Saadia Naeem, Greater Los Angeles Veterans Research and Education Foundation (GLAVREF); Virginia Moore, VA Greater Los Angeles Sleep Center; Moeed Chohan, VA Greater Los Angeles Sleep Center; Lizzeth Gil, VA Greater Los Angeles Sleep Center; Michelle Zeidler, VA Greater Los Angeles Sleep Center; Garrett Ash, VA Connecticut Healthcare System; Constance Fung, VA Greater Los Angeles Sleep Center	
Demonstrating the Value and Impact of Human Factors-Based Projects in Healthcare Authors: Jason Saleem, University of Louisville; Kurt Ruark, Veterans Health Administration; Kyle Maddox, Veterans Health Administration; Jennifer Herout, U.S. Department of Veterans Affairs	
HART12: Human-Artificial Intelligence Teaming for the U.S. Navy: Developing a Holistic Research Roadmap <i>Flagstaff</i> Session Chair: <i>Erin Chiou (Arizona State University)</i>	Discussion Panel Human AI Robot Teaming (AI) Track
Human-Artificial Intelligence Teaming for the U.S. Navy: Developing a Holistic Research Roadmap Panelists: Jason Wong, Naval Information Warfare Center Pacific; Robert Gutzwiller, Arizona State University; Maia Cook, Pacific Science & Engineering Group; Corey Fallon, Pacific Northwest National Laboratory	

11:15 a.m12:15 p.m.	
SU2 with ED: Human-Centered Design Across Contexts: Workspaces, Emotions, and Sacred Spaces FLW Salon A Session Chair: David Rempel (UCSF)	Lecture Environmental Design Track Sustainability Track
Promoting Eco-Friendly Behavior in University Activity-Based Workspaces Through Eco-Feedback Authors : Sara Sadralashrafi, Clemson University; Mohammadhossein Nahavandian, Clemson University; David Neyens, Clemson University; Bart Knijnenburg, Clemson University; Da Li, Clemson University	
A Novel Affective Design Tool: Task Emotion Analysis (TEA) Authors: Myounghoon Jeon, Virginia Polytechnic Institute and State University; Gayoung Ban, Virginia Polytechnic Institute and State University; Mungyeong Choe, Virginia Polytechnic Institute and State University; Yeana Bond, Virginia Polytechnic Institute and State University	
Ecclesiastical Ergonomics? Human Factors in Traditional and Modern Sacred Architecture Authors: Peter Trocha, Texas A&M University; Thomas Ferris, Texas A&M University	
EDU5: HF Education—Transdisciplinary Programs and Technology FLW Salon B Session Chair: Jiwon Kim (Iowa State University)	Lecture Education Track
Developing an Undergraduate Human Factors Program at Michigan Technological University: Process and Lessons Learned Authors: Kelly S. Steelman, Michigan Technological University; Samantha L. Smith, Michigan Technological University	
Market Analysis of Undergraduate Degrees Related to Human Factors, HCI, and UX Authors: Stephen Gilbert, Iowa State University; Sarah Pippin, Iowa State University; Steven Hoopingarner, Iowa State University; Tiffany Kayser, Iowa State University; Eliot Winer, Iowa State University	
From Textbooks to Tutors: Can Generative Language Models Engage and Empower Students? Authors: John Lee, University of Wisconsin – Madison; Linda Boyle, New York University; Christopher Wickens, Colorado State University; Yili Liu, University of Michigan	
S5: Alertness and Adaptability <i>FLW Salon C</i> Session Chairs: Mustafa Demir (Texas A&M University); Dylan Jurski (Idaho National Laboratory, University of Florida)	Lecture Safety Track
The Impact of Task Complexity on Reaction Time to Vibrotactile Warnings in Struck-by Hazards Authors: Xiang Yang, Virginia Polytechnic Institute and State University; Maury Nussbaum, Virginia Polytechnic Institute and State University; Nazila Roofigari-Esfahan, Virginia Polytechnic Institute and State University	
The Crucial Role of Adaptability in Mitigating the Negative Impacts of Skill Decay in Astronaut Teams: A Systematic Review & Thematic Analysis Authors: Lila Berger, Rice University; Dr. Eduardo Salas, Rice University; Maha Khalid, Rice University	
SS11: Meet the Editors Rimrock	Special Session
Meet the Editors	

 ST11: Vehicle Interfaces, Displays and Warnings—Part 2 FLW Salon G Session Chairs: James Parkinson (Purdue University); Sameeran Kanade (Purdue University) Driver Behavior in Response to Forward Collision Warnings Considering Driving Context Authors: Zhouqiao Zhao, Massachusetts Institute of Technology Comparing Static and Dynamic Vibration Cues in Wristband Haptic Feedback for Enhanced Driver Response in Automated Vehicles Authors: Wei-Hsiang Lo, San Jose State University; Gaojian Huang, San Jose State University	Lecture Surface Transportation Track
OE9: Shoulder Exoskeleton <i>FLW Salon H</i> Session Chair: Jacob Banks (Baxter International) A Pilot Study Evaluation of a Passive Shoulder Exoskeleton for a Drilling-Fastening Task Authors: Jianyang Tang, University of Michigan; Dongjoon Kong, The Boeing Company; Leia Stirling,	Lecture Occupational ErgonomicsTrack
 University of Michigan Effects of Using Arm-Support Exoskeletons on Muscle Coordination During a Pseudo-Static Overhead Task: Preliminary Analysis of Muscle Synergy Authors: Hanjun Park, Virginia Polytechnic Institute and State University; Aanuoluwapo Ojelade, The State University of New York at Buffalo; Sunwook Kim, Virginia Polytechnic Institute and State University; Maury Nussbaum, Virginia Polytechnic Institute and State University Effects of Shoulder Exoskeletons on Muscular Load and Postural Stability during Electrical Cable Pulling Tasks on an Unstable Work Platform Authors: Kiana Kia, Oregon State University; Allen Chan, Oregon State University; Mina Salehi Sedeh, Oregon State University; Matthew Agnew, Oregon State University; Christopher Pan, National Institute for Occupational Safety and Health; Liying Zheng, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety and Health; Christopher Warren, National Institute for Occupational Safety a	
State University PP7: Information and Safety FLW Salon I Session Chair: Mahdis Tajdari (Virginia Polytechnic Institute and State University); Manhua Wang (Virginia Polytechnic Institute and State University) Advertisement Blindness in Mobile Social Media Apps Authors: Nora Szladovics, San Jose State University; Evan Palmer, San Jose State University Beyond the Cone of Uncertainty: Exploring the Flexibility of Animated Risk Trajectories for Improving Hurricane Risk Communication	Industry/ Practitioner Case Study Lecture Perception and Performance Track
Improving Hurricane Risk CommunicationAuthors: Amelia Warden, Colorado State University; Jessica Witt, Colorado State University; Benjamin Clegg, Montana State UniversityThe Effects of Voice Features in Voice Assistant Systems on Human Perceived Emotion Authors: Nishanth Prabhu Kurunthachalam, University of Michigan; Sang-Hwan Kim, University of Michigan	

HC13: Ergonomics in Healthcare II Grand Ballroom Session Chairs: Changxu Wu (Tsinghua University); Ryan Villarreal (Purdue University)	Lecture Health Care Track
Evaluation of a Passive Upper Extremity Exoskeleton on Reducing Discomfort and Workload in Cardiac Sonographers Authors: Tianke Wang, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic; Michael Martineau, Mayo Clinic; Merri Bremer, Mayo Clinic; Garvan Kane, Mayo Clinic; M. Susan Hallbeck, Mayo Clinic	
Comparing the Effectiveness and Applicability of Two Intraoperative Break Scheduling Strategies on Surgeons' Workload and Body Part Discomfort Using OR-Stretch Web-App Authors: Hamid Norasi, Mayo Clinic; Mojgan Zoaktafi, Mayo Clinic; Joseph Kim, Mayo Clinic; Tianke Wang, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic; M. Susan Hallbeck, Mayo Clinic	
Exploring the Social Contexts of Exoskeleton Design and Implementation in Long-Term Care: A Study of Nurses and Nurse Managers with Musculoskeletal Disorders Authors: Eleanore Scheer, University of Virginia; Jad Atweh, University of Virginia; Elizabeth Thompson, University of Virginia; Jaiden Murray, University of Virginia; Elvie Sellers, University of Virginia; Divya Srinivasan, Clemson University; Rupa Valdez, University of Virginia	
1:30-2:30 p.m.	

XR6: Heightening the Virtual Reality Experience With Movement and Cueing FLW Salon A Session Chairs: Chidubem Nuela Enebechi (Purdue University); Elda Lilian Garza (Explico)	Lecture Extended Reality Track
Embodiment of Virtual Body and Extremities With Movement Control in Reaching Tasks Using Virtual Reality Authors: Linfeng Wu, North Carolina State University; Karen Chen, North Carolina State University	
Study of Graphic Armatures, Multimodal Cues and Numeric Measures in Virtual Reality on Learners' Performance and Workload Author: Karen B. Chen, North Carolina State University	
Vibrotactile Displays to Support Hazard Awareness in Excavation Operations Authors: S. M. Ashif Hossain, Texas A&M University; Allen Yin, Texas A&M University; Dr. Thomas Ferris, Texas A&M University	
AC2: Sensing in Augmented Cognition FLW Salon B Session Chair: Holden Duffie (Clemson University)	Lecture Augmented Cognition Track
Does Augmenting Virtual Reality-Based Cognitive Training With Longitudinal, Anodal Transcranial Direct Current Stimulation Improve Visual Search Performance? A Neurobehavioral Evaluation Authors: Akash K Rao, Indian Institute of Technology Mandi; Raghav Bhat, Arizona State University; Arnav Bhavsar, Indian Institute of Technology Mandi; Shubhajit Roy Chowdhury, Indian Institute of Technology Mandi; Ramsingh Negi, Institute of Nuclear Medicine and Allied Sciences; Varun Dutt, Indian Institute of Technology Mandi	
Towards Adaptive Virtual Reality Systems: Understanding Emotional and Physiological Responses in VR Game Authors: Allison Bayro, Arizona State University; Heejin Jeong, Arizona State University	
Eye, Heart, the Brain: The Psychophysiology of Trust in AVs Authors: Yinsu Zhang, University of Wisconsin - Madison; Ranjana Mehta, University of Wisconsin - Madison	

CEDM9: Distributed Work II	Lecture
FLW Salon C	Augmented Cognition Track
Session Chair: Martijn IJtsma (The Ohio State University)	
Exploring Collaborative Patterns in Neurodiverse Teams: A Hidden Markov Model Approach Using Physiological Signals Authors: Sunwook Kim, Virginia Polytechnic Institute and State University; Manhua Wang, Virginia Polytechnic Institute and State University; Megan Fok, Virginia Polytechnic Institute and State University; Caroline B. Hornburg, Virginia Polytechnic Institute and State University; Myunghoon Jeon, Virginia Polytechnic Institute and State University; Angela Scarpa, Virginia Polytechnic Institute and State University	
Assessing Team Performance in Complex Team-Based Command and Control Missions Through Information Sharing and Team Cohesion Authors: Chrissy Chubala, Defence Research & Development Canada; Aren Hunter, Defence Research & Development Canada; Lori Dithurbide, Dalhousie University; Heather Neyedli, Dalhousie University	
Real-Time Gaze Sharing Techniques and Their Influence on Performance and Shared Situational Awareness of Teammates in UAV C2 Operations Authors: Jad Atweh, University of Virginia; Mohamad El Iskandarani, University of Virginia; Sara Riggs, University of Virginia	
SS12: President-Elect Forum FLW Salon D	Special Session
Where is HFES Going and How are We Going to Get There? Authors: Camille Peres, Nuclear Regulatory Commission	
ST12: Human Factors Concerns for a Mixed Equipage Society	Discussion Panel Surface
<i>FLW Salon G</i> Session Chair: <i>Bridget Kelley (The MITRE Corporation)</i>	Transportation Track
Human Factors Concerns for a Mixed Equipage Society Panelists: Dr. Carryl Baldwin, Wichita State University; Tracy Lennertz, Volpe National Transportation Systems Center; Oliver Carsten, University of Leeds; Chris Monk, Exponent, Inc.	
OE10: The Role of Anthropometry in Ergonomics Design for Occupational Safety: Current Status and Gaps FLW Salon H	Discussion Panel Occupational Ergonomics Track
Session Chair: Rammohan Maikala (National Safety Council)	
The Role of Anthropometry in Ergonomics Design for Occupational Safety: Current Status and Gaps Panelists: Patrick Dempsey, National Institute for Occupational Safety and Health; Linsey Griffin, University of Minnesota; Joseph Parham, U.S. Army DEVCOM Soldier Center; Divya Srinivasan, Clemson University	
PP8: Perception of Automation	Lecture Perception and
<i>FLW Salon I</i> Session Chair: Behzad Esmaeili (Purdue University); Fernando Munoz Gomez Andrade (Oregon State University)	Perception and Performance Track
The Influence of Perceptions of Task Difficulty on Use of an Automated Attention Aid Author: Colleen Patton, North Carolina State University	
Misses Or False Alarms? How Error Type Affects Confidence In Automation Reliability Estimates Authors: Ebernoe Guzman-Bonilla, North Carolina State University; Colleen Patton, North Carolina State University	
Graphical Features & Perceptions of Reliability Authors: Virginia Sullivan, University of Alabama in Huntsville; Joseph Atchley, University of Alabama in Huntsville; Lisa Vangsness, University of Alabama in Huntsville; Nathan Tenhundfeld, University of Alabama in Huntsville	

HC14: Equity in Healthcare II Grand Ballroom	Lecture Health Care Track
Session Chair: Prajina Edayath (University of Texas at El Paso)	
Rethinking CPR training: The Significance of "Man" in Manikin on CPR Effectiveness Authors: Tara Cohen, Cedars-Sinai Medical Center; Falisha Kanji, Cedars-Sinai Medical Center; Efren Esteves, Cedars-Sinai Medical Center; Yujie Cui, Cedars-Sinai Medical Center; Pooja Nawathe, Cedars- Sinai Medical Center	
Towards Safety Through Dismantling Systemic Racism Within the Healthcare Profession Author: Myrtede Alfred, University of Toronto	
HART13: Advancing Human-Al-Robot Teaming Research	Lecture Human Al Robot
<i>Flagstaff</i> Session Chair: Anirudh More (Virginia Polytechnic Institute and State University)	Teaming (AI) Track
Human Autonomy Teaming in a Cooperative Gamified Testbed: How Can Al Teammates Support Teamwork Processes? Authors: Yvonne Farah, Iowa State University; Michael Dorneich, Iowa State University	
Development of an Analysis of Alternatives Tool for Human-Agent Teaming Research Authors: Daniel Nguyen, Aptima, Inc.; Myke Cohen, Aptima, Inc.; Summer Rebensky, Aptima, Inc.; Ramisha Knight, Aptima, Inc.; Cherrise Ficke, Aptima, Inc.; Lauren Fortier, Aptima, Inc.; Brent Fegley, Aptima, Inc.	
Human Empowerment as a Key Component of Human-Al Robot Teaming Authors: Gabrielle Gillis, University of Connecticut; James Hughes, University of Connecticut; Christian Piscopo, University of Connecticut	
3:00-4:00 p.m.	
AS7: Aerospace Systems with Cognitive Engineering and Decision Making FLW Salon A Session Chair: Philippe Doyon-Poulin (Polytechnique Montreal)	Lecture Aerospace Systems Track
New Feature on Radar Display to Enhance Air Traffic Controller Performance and Situation Awareness Authors: Mohamed Rostom, Embry-Riddle Aeronautical University; Dr. Andy Dattel, Embry-Riddle Aeronautical University; Sergio Taleisnik, Embry-Riddle Aeronautical University	
Effects of Weather Information Observability and Uncertainty on Pilot Assessment of Weather Conditions and Decision Making	

Authors: Barrett Caldwell, Purdue University; Michael Splitt, Florida Institute of Technology; Evv Boerwinkle, Purdue University

Models of Human-Automation Systems: Initial Analysis of the 737MAX AccidentsAuthors: Dr. Asaf Degani, General Motors; Dr. Immanuel Barshi, NASA Ames Research Center; RobertMauro, University of Oregon; Dr. Randall Mumaw, San Jose State University

HPM3: Human Performance Modeling in Education and Training FLW Salon B Session Chair: Dick Steinberg (Raytheon)	Lecture Human Performance Modeling Track
Assessing Student Performance Through Pupil Dilation and Problem-Solving Time in Augmented Reality Authors: Jung Hyup Kim, University of Missouri, Columbia; Siddarth Monhanty, University of Missouri, Columbia; Varun Pulipati, University of Missouri, Columbia; Fang Wang, University of Missouri, Columbia; Sara Mostowfi, University of Missouri, Columbia; Danielle Oprean, University of Missouri, Columbia; Yi Wang, University of Missouri, Columbia; Kangwon Seo, University of Missouri, Columbia	
Humanizing Al in Education: A Readability Comparison of LLM and Human-Created Educational Contents Authors: Md Mamunur Rashid, University of Central Florida; Nilsu Atilgan, University of Central Florida; Jonathan Dobres, Virtual Readability Lab; Stephanie Day, University of Central Florida; Veronika Penkova, Virtual Readability Lab; Mert Küçük, Virtual Readability Lab; Steven R. Clapp, University of Central Florida; Ben D. Sawyer, University of Central Florida	
Calibrating Trust and Reliance in Variable-Reliability Automation Authors: Christophe Holland, Dalhousie University; Grace Perry, Dalhousie University; Heather Neyedli, Dalhousie University	
S6: Safety Cognition: From Construction Sites to Roadways <i>FLW Salon C</i> Session Chair: <i>Atif Ashraf (Texas A&M University)</i>	Lecture Safety Track
Enhancing Hazard Recognition in Construction: Developing Personalized Safety Training to Overcome Cognitive Limitations Authors: Sogand Hasanzadeh, Purdue University; Kyeongsuk Lee, Purdue University; Behzad Esmaeili, Purdue University	
The Effects of External Stressors on Human Error Within High-Risk Construction Environment Authors: Sogand Hasanzadeh, Purdue University; Shiva Pooladvand, Purdue University	
Effects of Road Sign Design Features on International Driver Comprehension of Road Signs Authors: Hao-Jie Su, University of Michigan; Yili Liu, University of Michigan	

LBR3: Late-Breaking 3	Lecture
FLW Salon D	Late Breaking Results
Session Chair: Duha Alkurdi (University of Michigan, Dearborn)	Results
Agree or Disagree: The Role of Agreeableness in Decision-Making with Multi-Robot Teams Authors: Jennifer J Mitchell, Virginia Polytechnic Institute and State University; Madison Harmon, Virginia Polytechnic Institute and State University; Myounghoon Jeon, Virginia Polytechnic Institute and State University	
Exploring Proxemic Factors between Older Adults and an Assistive Robots Authors: Yao-Lin Tsai, University of illinois at Urbana-Champaign; Samuel Olatunji,University of illinois at Urbana-Champaign; Wendy Rogers,University of illinois at Urbana-Champaign	
From Screen to Scene: Using Video vs. Virtual Reality in Human-Robot Visual Perspective Taking Authors: Noushin Jamaatlou, George Mason University; Christi Svancara, George Mason University; Pawinee Pithayarungsarit, George Mason University; Hendeke Tafesse, George Mason University; Craig McDonald, George Mason University; Eva Wiese, Technische Universität Berlin;Eileen Roesler, George Mason University	
Exploring Emotional Bonds: A Systematic Review of Attachment in Human-Robot Interaction Authors: Jennifer J Mitchell, Virginia Polytechnic Institute and State University; Myounghoon Jeon, Virginia Polytechnic Institute and State University	
Concept Cards for Human-Centered AI Authors: Taissa Gladkova, The MITRE Corporation; Stephen Dorton, The MITRE Corporation; Tracy Sanders, The MITRE Corporation; Jeff Stanley, The MITRE Corporation; Joanna Korman, The MITRE Corporation; Mark Zimmermann, The MITRE Corporation; Jason Ralph, NUWCDIVNPT; Stephanie Speaker, NUWCDIVNPT	
Smart Home Users' Security and Privacy Perceptions and Actions Differ By Device Category: Results from a Representative U.S. Survey Authors: Julie Haney, National Institute of Standards and Technology; Yasemin Acar, Paderborn University; Anna Li, Massachusetts Institute of Technology; Faith Haney, University of Maryland	
ST13: Interactions With Pedestrians and the Environment	Lecture
<i>FLW Salon G</i> Session Chair: Bridget Kelley (The MITRE Corporation); Myeongkyu Lee (Purdue University)	Surface Transportation Track
Naturalistic Analysis of Bidirectional Gazing During Vehicle-Pedestrian Road Crossings Author: Linda Pipkorn, Massachusetts Institute of Technology	
The Role of eHMI in Reducing Driver Overtaking Decisions Around Low Speed Automated Vehicles Yielding to Pedestrians Authors: Bradley Drahos, University of Minnesota; William Kessler, University of Minnesota; Curtis	
Craig, University of Minnesota; Nichole Morris, University of Minnesota	
Effects of Driver Individual Differences on Interaction With Driving Automation During Intersection Incursions Authors: Dina Kanaan, University of Toronto; Birsen Donmez, University of Toronto	
	Discussion Devel
USE7: Industry Practitioners Unleashed! Ask Us Anything	Discussion Panel Usability
FLW Salon H	and System
Session Chairs: Amrita Sidhu Maguire (Dell Technologies)	Evaluation Track
Moderators: Angie Avera (Peloton Interactive)	
Industry Practitioners Unleashed! Ask Us Anything Panelists: Amrita Maguire, Dell Technologies; Christy Harper, End to End User Research; Melissa Meingast, Hewlett Packard Enterprise; Anne-Marie McReynolds, Dell Technologies; Michael Bartha, Google	

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SF2: Human-Machine Interaction and Trust FLW Salon I	Lecture Student Forum Track
Session Chair: Abigail Jei (Texas A&M University)	
Investigating the Utility of Artificial Intelligence Models to Distinguish Between Physical and Mental Stress Among ICU Nurses Authors: Farzan Sasangohar, Texas A&M University; Samira Ziyadidegan, Texas A&M University;	
Pratima Saravanan, Oklahoma State University	
Task-Allocation Decisions of Human-UAS Collaboration: Effects of Workload, Trust, and Self- Confidence	
Authors: Yining (Elena) Zhang, Rice University; Jing Chen, Rice University; Liang Sun, New Mexico State University; Bin Hu, University of Houston; Michael Politowicz, NASA Langley Research Center; Eric Chancey, NASA Langley Research Center	
Failing Consistently and Expectedly: Effects of Error Consistency and Drivers' Mental Models on Trust in Automated Vehicles Authors: Xiaoxuan "Alicia" Cheng, Rice University; Jing Chen, Rice University	
HC15: Patient-Centered Care and Process Improvement in Healthcare FLW Salon I	Lecture Health Care Track
Session Chair: Megan Salwei (Vanderbilt University Medical Center)	
Using EMG to Better Understand Patient Pain and Stress During Routine Mammography Authors: Krystyna Gielo-Perczak, University of Connecticut; Riley Mcnaboe, University of Connecticut; Hugo Posada-Quintero, University of Connecticut	
Challenges to Integrating Portable Magnetic Resonance Imaging Systems in Emergency Medical Service Ambulances for Stroke Care Authors: Arvind Kolangarakath, Clemson University; Kapil Chalil Madathil, Clemson University; Sudeep Hegde, Clemson University; Shubham Agrawal, Clemson University; Christine Holmstedt, Medical University of South Carolina; Dustin LeBlanc, Medical University of South Carolina; Jillian Harvey, Medical University of South Carolina; Maria Spampinato, Medical University of South Carolina; Todd McGeorge, Charleston County; Donna Roberts, Medical University of South Carolina	
Considerations for Developing Patient-centered Clinical Decision Support: Preventing Older Adult Falls after Emergency Department Visits Author: Hanna J. Barton, University of Wisconsin – Madison	
HART14: Human-Al-Robot Teaming Applications Flagstaff	Lecture Human AI Robot Teaming (AI)
Session Chair: Sakshi Taori (Virginia Tech Polytechnic Institute and State University)	Track
Cooking and Cleaning – Exploratory Investigation of Users' Perception of How Two Domestic Service Robots (DSRs) Should Collaborate Authors: Tal Oron-Gilad, Ben-Gurion University of the Negev; Yisrael Parmet, Ben-Gurion University of the Negev	
Joint Intelligence, Surveillance, and Reconnaissance Mission Collaboration with Autonomous Pilots Authors: Richard Agbeyibor, Georgia Institute of Technology; Vedant Ruia, Georgia Institute of Technology; Jack Kolb, Georgia Institute of Technology; Karen M. Feigh, Georgia Institute of Technology	
Exploring Information Needs for Supervisory Control of Autonomous Ships – A Navigators' Perspective	
Authors: Koen van de Merwe, University of South-Eastern Norway; Steven Mallam, Memorial University of Newfoundland; Salman Nazir, University of South-Eastern Norway; Øystein Engelhardtsen, DNV	

4:15-5:15 p.m.	
XR7: Performance and Usability in Extended Reality FLW Salon A Session Chairs: Elda Lilian Garza (Explico); Ronak Ranjitkumar Mohanty (University of Wisconsin - Madison)	Lecture Extended Reality Track
Sickness Imminent: How Mental Models of Imminent Motion Affect the Onset of Cybersickness in Virtual Reality Locomotion Authors: Morgan Sinko, Texas A&M University; Caden George, Texas A&M University; Elliot Taylor, Texas A&M University; Thomas Ferris, Texas A&M University	
User Comfort in VR/AR Headsets: A Mathematical Investigation into Ergonomic and Functional Limitations of Eye Tracking Technology Authors: Jasmine Roberts, Microsoft Research; Steven Christian, University of Nevada Reno School of Medicine	
Rapid Prototyping and Evaluation of External Human-Machine Interfaces for Robotaxis in Virtual Environments Authors: Ahmad Albawaneh, University of Illinois Chicago; Shruthi Venkatesha Murthy, Oakland University; Zaid Abdelfattah, Oakland University; Jeffrey Kim, Troy High School; Sanjith Sambath, International Academy Central; Hyungil Kim, University of Illinois Chicago	
SD2: Methodologies in Practice: Nuclear Power and Autonomous Vehicles FLW Salon B Session Chairs: John Paul Plummer (Basic Commerce and Industries, Inc.); Frank Lacson (Imagine Believe Realize, LLC)	Lecture System Development Track
Development of a Sociotechnical Methodology to Support Nuclear Power Plant Modernization Author: Casey Kovesdi, Idaho National Laboratory	
Multi-Stage Evaluation Using Gonuke Authors: Ronald Boring, Idaho National Laboratory; Thomas Ulrich, Idaho National Laboratory; Roger Lew, University of Idaho	
Ethical Considerations for Highly Automated and Autonomous Vehicles: A Structured Hierarchy and Methodology Author: Asaf Degani, General Motors	
CEDM10: Uncovering the Requirements of Cognitive Work FLW Salon C Session Chair(s): Jad Atweh (University of Virginia)	Lecture Cognitive Engineering & Decision Making
Investigating the Impact of User Interface Designs on Expectations About Large Language Models' Capabilities Authors: Felix Gröner, Arizona State University; Erin K. Chiou, Arizona State University	Track
Designing for Trust: Supporting Human-Machine Teaming in Space Domain Awareness Authors: Rachel Morris, Applied Decision Science, LLC; Laura Militello, Applied Decision Science, LLC; Garrett Fitzgerald, U.S. Space Force	
Integrating Cognitive Work Analysis (CWA) with Adaptive Control of Thought-Rational (ACT-R) Authors: Fan He, University of Waterloo; Shi Cao, University of Waterloo; Sebastian Fischmeister, University of Waterloo; Catherine Burns, University of Waterloo	

ST14: Considerations of Interior and Exterior Lighting Conditions	Lecture
FLW Salon G	Surface
Session Chairs: Bridget Kelley (The MITRE Corporation); Jing Zang (Purdue University)	Transportation Track
An Examination of Driver Interpretation and Response to Snowplow Rear-End Lighting Configurations	
Authors: Bradley Drahos, University of Minnesota; Katelyn Schwieters, University of Minnesota; Curtis Craig, University of Minnesota; Nichole Morris, University of Minnesota	
Alternative Emergency Vehicle Lighting Affects Traffic Behaviors Authors: Kajsa Weibull, The Swedish National Road and Transport Research Institute; Björn Lidestam, The Swedish National Road and Transport Research Institute; Johanna Holm, Linköping University, Erik Prytz, Linköping University	
Interior Illumination Impact on Night Driving in a Driving Simulator Author: Ekim Koca, University of Virginia	
OE11: Fatigue	Lecture
ELW Salon H	Occupational
Session Chair: Suman Chowdhury (Texas Tech University)	Ergonomics Track
Shoulder Muscle Activities in Backpack Vacuuming Tasks Author: Stephen Bao, Washington State Department of Labor and Industries	
Evaluating the Impact of Collaborative Robots in E-Waste Disassembly through EMG-EMG Coherence Analysis Author: <i>Boyi Hu, University of Florida</i>	
Understanding Fatigue Patterns for Dynamic Tasks: A Recurrence Model Approach Authors: Zahra Vahedi, University at Buffalo; Mohammad Shakiba, University at Buffalo; Setarhe Kazemi Kheiri, University at Buffalo; Fadel Megahed, Miami University; Hongyue Sun, University of Georgia; Lora Cavuoto, University at Buffalo	
PP9: Detection and Measurement of Human Biometrics and Behavior	Alt Format
<i>FLW Salon I</i> Session Chair: <i>Tiash Rana Mukherjee (Texas A&M University)</i>	Perception and Performance Track
Biosensing - Detection & Measurement of Human Biometrics & Behavior Author: Dr. Maureen August, General Motors	
HC16: Improving Healthcare Safety—What's New and Not-So-New Insights From the Safety-II Framework for Safety Improvement in Complex Adaptive Systems Grand Ballroom	Discussion Panel Health Care Track
Session Chair: Sudeep Hegde (Clemson University, Texas A&M University)	
Moderator: Mike Rayo (The Ohio State University)	
Improving Healthcare Safety: What New and Not-So-New Insights From the Safety-II Framework for Safety Improvement in Complex Adaptive Systems Panelists: Yan Xiao, University of Texas at Arlington; Ayse Gurses, Johns Hopkins University; Nicole	
Werner, Indiana University, Bloomington	
HART15: Future of Team Research: On Teamness and Dimensions of Variability in Teams Flagstaff	Discussion Panel Human Al Robot
Session Chair: Myke Cohen (Arizona State University; Aptima, Inc.)	Teaming (AI) Track
Future of Team Research: On Teamness and Dimensions of Variability in Teams Panelists: Jamie Gorman, Arizona State University; Stephen Fiore, University of Central Florida; Wayne Gray, Rensselaer Polytechnic Institute; Sounak Banerjee, Rensselaer Polytechnic Institute; Leanne Hirshfield, University of Colorado; Zachary Klinefelter, Aptima, Inc.	
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Poster Session 2

McArthur Ballroom

1. Can Exoskeletons Increase Older Workers' Confidence? Implications of Exoskeletons on Aging Workers' Self-Efficacy

Authors: Sahar Khanpour, Texas Tech University; Yves Valentin, Texas Tech University; HeeSun Choi, Texas Tech University

2. Positive Self-Perceptions of Aging Are Associated With Higher Physical Activity Scores Authors: Rachel Sutton, Wichita State University; Traci Hart, National Institute for Aviation Research (NIAR); Carryl Baldwin, Wichita State University

3. Promoting Physical Activity in Long-Term Care with Augmented Reality Experiences Authors: Mark Chignell, University of Toronto; Debbie Barton, Centre for Innovation and Research in Aging; Lisa Fannin, Centivizer Inc.; Justine L. Estey, Centre for Innovation and Research in Aging;

in Aging; Lisa Fannin, Centivizer Inc.; Justine L. Estey, Centre for Innovation and Research in Aging; Danica Maillet, University of Moncton; Caroline Lovens, University of Moncton; Jalila Jbilou, University of Moncton

4. Vulnerable Communities in the Face of Heat: A Pilot Study on Perceptions, Behaviors, and Support Networks During Heat Events

Authors: Tian Yao, Iowa State University; Michael Dorneich, Iowa State University; Ulrike Passe, Iowa State University; Nicholas Schwab, University of Northern Iowa; Mary Losch, University of Northern Iowa, Caroline Krejci, University of Texas at Arlington; Jeremy Caron, City of Des Moines

5. Cognitive and Perceptual Augmentation through Neuromodulation during Fatiguing Tasks is Sex-specific

Authors: Kieran Nichols, University of Wisconsin – Madison; Ranjana Mehta, University of Wisconsin – Madison

6. Exploring The Intersection of Sex and Race within Transcranial Doppler Sonography: Implications for Future Neuroergonomic Research and Application

Authors: Chidera Azubike, Texas Tech University; Eric Greenlee, Texas Tech University

7. Measuring User Response to Attention Guidance Using the Integrated Cognitive User Assistance System

Authors: Benedict Wilkins, Royal Holloway, University of London; Szonya Durant, Royal Holloway, University of London; Elizabeth Fox, U.S. Air Force Research Laboratory; Kostas Stathis, Royal Holloway, University of London

8. A Comparative Evaluation of Ad Hoc Team Performance, Effectiveness, and Interactions in Modern Collaborative Technology

Authors: Dr. Beau Schelble, Clemson University; Beau Schelble, Clemson University; Caitlin Lancaster, Clemson University; Rohit Mallick, Clemson University; Nathan McNeese, Clemson University; Guo Freeman, Clemson University; Richard Pak, Clemson University

9. Expanding Computer-Aided Text Analysis by Using Fine-Tuned Transformers for Classification of Domain-Specific Teaming Dialogues

Authors: Peter Zukerman, DCS Corp; Adam Stiff, DCS Corp; Michael Tolston, U.S. Air Force Research Laboratory

10. Objective Metrics to Measure Non-Technical Skills of Surgeons: A Preliminary Study Authors: Shraddhaa Narasimha, Purdue University; Marian Obuseh, Purdue University; Nicholas Eric Anton, Purdue University; Haozhi Chen, Purdue University; Dimitrios Stefanidis, Indiana University School of Medicine, Fort Wayne; Denny Yu, Purdue University

11. Robotic Arm Perception: an Eyetracking Study Exploring Causal Relations and Perceived Trust Authors: *Elizabeth Merwin, Florida Atlantic University; Jacqueline Hammack, Florida Atlantic University; Teresa Wilcox, Florida Atlantic University*

12. Context Contributes to Two-Factor Authentication Choices

Authors: Fabrizio Chavez, Rice University; Alejandra Fernandez-Reyes, Rice University; Michael Byrne, Rice University

13. Investigating Training and Priming to Combat Phishing on Instagram Shop

Authors: Katherine Garcia, Rice University; Jing Chen, Rice University

Poster Aging Track Augmented Cognition Track Children's Issues Track Communications Track Cybersecurity Track Education Track Environmental Design Track General Sessions Track Human Al Robot Teaming (AI) Track Macroergonomics Track Occupational **Ergonomics Track** Student Forum Track Surface Transportation Track Sustainability Track System Development Track

14. Young Adults' Perception of Privacy and Security Regarding Online Healthcare Platforms	Poster
Authors: Shababa Matin, Rice University; Christine Petersen, Rice University; Jing Chen, Rice University 15. Applying User-Centered Design to Space Mission Planning	Aging Track Augmented
Authors: Michelle Aros, Embry-Riddle Aeronautical University; Karis Cooks, Embry-Riddle Aeronautical University; Leo Materne, Embry-Riddle Aeronautical University; Jaia Huggins, Embry-	Cognition Track Children's Issues
Riddle Aeronautical University; Joseph Anderson, Embry-Riddle Aeronautical University; Jesika Geliga- Torres, Embry-Riddle Aeronautical University; Edison Martinez, Embry-Riddle Aeronautical University;	Track Communications Track
David Canales, Embry-Riddle Aeronautical University; Barbara Chaparro, Embry-Riddle Aeronautical University	Cybersecurity Track
16. Degrees of Freedom Should be Abandoned in Social Science Statistics Author: Scott McIntyre, Arizona State University	Education Track Environmental
17. Effectiveness of Augmented Reality Training in a Part 147 Maintenance Technician School	Design Track
Authors: Molly Zimmerman, Embry-Riddle Aeronautical University; Barbara Chaparro, Embry-Riddle Aeronautical University; Stephanie Mello, Embry-Riddle Aeronautical University; Christopher J Lee, Embry-Riddle Aeronautical University; Andrew R Dattel, Embry-Riddle Aeronautical University	General Sessions Track Human Al
18. Emotional Ability and Its Connection with Academic Performance: An Exploratory Study on	Robot Teaming (AI) Track Macroergonomics
HBCU Students Post-COVID Author: Hyung Nam Kim, North Carolina A&T State University	Track Occupational
19. K-12 Outreach: Experiential Learning in Human Factors with Laparoscopic Surgery Trainer Box Author: Nathan Lau, Virginia Polytechnic Institute and State University	Ergonomics Track Student Forum Track
20. P-Curving the Evidence: P-Values Published in Human Factors (2017-2023) Authors: Jannah Moussaoui, Drexel University; Jason McCarley, Oregon State University	Surface Transportation
21. Pedagogical Agent in Math Versus Art Lessons: Impact on Learning, Perceived Workload, and Motivation	Track Sustainability Track
Authors: Reganne Miller, Georgia Institute of Technology; Richard Catrambone, Georgia Institute of Technology	System Development
22. Teaching ChatGPT: Attempting to Demonstrate the Protégé Effect with a Large Language Model Learner	Track
Author: Zachary Tidler, Georgia Institute of Technology	
23. Using a Self-Compassion Intervention to Increase Engineering Self-Efficacy of Women Pursuing Engineering in Higher Education Authors: Taylor Kampf, Arizona State University; Heather Lum, Arizona State University	
24. Visual Instructor Presence: Impacts and Implications Author: <i>Eve Vazquez, North Carolina State University</i>	
25. Trusting Automation: Applications in the Hospitality Industry Authors: <i>Austin Silva, Arizona State University; Erin Chiou, Arizona State University</i>	
26. Human-Centric Metrics in Metaverse Evaluation Authors: Tianhang Liu, Arizona State University; Heejin Jeong, Arizona State University	
27. Cognitive Workload Evaluation of Onsite Workers Collaborating With a Teleoperated Robot in Assembly Tasks Using Heart-Rate	
Authors: Sakshi Taori, Virginia Tech Polytechnic Institute and State University, Sunwook Kim, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University; Austin Silva, Arizona State University; Erin Chiou, Arizona State University	
26. Human-Centric Metrics in Metaverse Evaluation Author(s): Tianhang Liu, Arizona State University; Heejin Jeong, Arizona State University	
27. Cognitive Workload Evaluation of Onsite Workers Collaborating With a Teleoperated Robot in Assembly Tasks Using Heart-Rate Author(s): Sakshi Taori, Virginia Tech Polytechnic Institute and State University, Sunwook Kim, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University	
28. Developing a Team Classification Scheme for Human-Agent Teaming	
Author(s): Hyesun Chung, University of Michigan; Timothy Holder, Massachusetts Institute of Technology; Julie Shah, Massachusetts Institute of Technology; X. Jessie Yang, University of Michigan	

29. Empirical Impacts of Independent and Collaborative Training on Task Performance and Improvement in Human-AI Teams	Poster
Authors: Christopher Flathmann, Clemson University; Beau G. Schelble, TRACE Research Group; Anna Galeano, Clemson University	Aging Track Augmented Cognition Track
30. Enhancing Privacy Protection for Time-Series Signals in Ergonomics Studies via Data Synthesis	Children's Issues Track
Authors: Liwei Qing, North Carolina State University; Sehee Jung, North Carolina State University; Bingyi Su, North Carolina State University; Lu Lu, North Carolina State University; Xu Xu, North Carolina State University	Communications Track
31. Entropy and Trust Dynamics in Human-Autonomy Teaming	Cybersecurity Track
Authors: Xiaoyun Yin, Arizona State University; Jamie Gorman, Arizona State University	Education Track Environmental
32. Establishing Human Observer Criterion for Artificial Social Intelligence Development: ASIST Study 2 Saturn	Design Track General Sessions
Authors: Lixiao Huang, Arizona State University; Matt Willett, Arizona State University; Mike Guo, Arizona State University; Aaron Teo, Arizona State University; Arya Chethikattil, Arizona State University; Myke Cohen, Arizona State University; Nancy Cooke, Arizona State University	Track Human Al Robot Teaming
 33. Evaluating Cross-Training's Impact on Perceived Teaming Outcomes for Human-AI Teams Author: Caitlin Lancaster, Clemson University 	(AI) Track Macroergonomics Track
34. Evaluation Approaches for Human-Al Teaming: Guidance for Practitioners Authors: Patty McDermott, The MITRE Corporation; Katja Sednew, The MITRE Corporation	Occupational Ergonomics Track Student Forum
35. Exploring ChatGPT Opinions on AI Empathy Author: Lamia Alam, Johns Hopkins University	Track
36. Exploring Learning Paths: Understanding the Learning Strategies of Artificial Intelligence	Surface Transportation Track
System Users and Their Involvement in Social Forums Authors: Tauseef Ibne Mamun, Michigan Technological University; Shane Mueller, Michigan Technological University	Sustainability Track
37. Exploring the Taxonomy of Gaming Attributes and Feasibility of Human-AI Testbeds: An Evaluation of Empirical Studies Authors: Maha Khalid, Rice University; Eduardo Salas, Rice University; Lila Berger, Rice University;	System Development Track
 38. Game On: Pioneering Human-Machine Teaming Research in Online Gaming Arenas Author: Zachary Klinefelter, Aptima, Inc. 	
39. Getting Along With Autonomous Teammates: Understanding the Socio-Emotional and Teaming Aspects of Trust in Human-Autonomy Teams Authors: Wen Duan, Clemson University; Nan Weng, Clemson University; Matthew Scalia, Arizona State University; Ruihao Zhang, Arizona State University; Jessica Tuttle, University of Dayton Research Institute; Xiaoyun Yin, Arizona State University; Shiwen Zhou, Arizona State University; Guo Freeman, Clemson University; Jamie Gorman, Arizona State University; Gregory Funke, U.S. Air Force Research Laboratory; Nathan McNeese, Clemson University	
40. Harmony Unleashed: The Interplay of Artificial Intelligence and Human Factors Authors: Renee Jones, Spectrum Software Technology, Inc.; Claire Hayes-Watson, Visionary Consulting Partners, LLC; Brandon Beltz, Spectrum Software Technology, Inc.; Waylon Krush, ZeroTrusted.ai; Femi Fashsakin, ZeroTrusted.ai; Lauren Reinerman-Jones, Southwest Research Institute	
41. High-Fidelity Worker Motion Simulation with Generative Al Authors: Neel Macwan, Arizona State University; Atharva Jitendra Hude, Arizona State University; Hari Iyer, Arizona State University; Heejin Jeong, Arizona State University; Shenghan Guo, Arizona State University	
42. How Can Artificial Intelligence Team-Mates Know What Humans Want? Using Eye-Tracking Data to Infer Human Preferences in Game-Theoretic Decision Tasks Author(s): Christopher Baber, University of Birmingham; Aditya Acharya, University of Birmingham; Andrew Howes, Exeter University; Leonardo Stella, University of Birmingham; Daniel Cassenti, U.S. Army DEVCOM; Alfred Yu, U.S. Army DEVCOM	
43. How Robots Might Trust Humans in Mixed Motive Situations Author(s): Christopher Baber, University of Birmingham; Sagir Yusuf, University of Birmingham; Edmund Hunt, Bristol University; Mehdi Sobhani, Bristol University; Sanja Milivojevic, Bristol University	

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44. Human-Centered and Explainable Artificial Intelligence in Nuclear Operations Authors: Anna Hall, Idaho National Laboratory; Ronald Boring, Idaho National Laboratory; Vivek	Poster Aging Track
Agarwal, Idaho National Laboratory	Augmented Cognition Track
45. Human-Cobot Collaboration in Manufacturing Systems: Design for Productivity and Trust Author: Nandhini Manikandan, Texas A&M University	Children's Issues Track
46. Improving Predictions of Cognitive States for an Adaptive Autonomous System Authors: Nicole Rote, University of Colorado, Boulder; Jacob Kintz, University of Colorado, Boulder; Torin Clark, University of Colorado, Boulder	Communications Track Cybersecurity
47. Kaleidoscope: Detecting the Tone of the Room Author: Jennifer McVay, CACI	Track Education Track
	Environmental Design Track
48. Mathematically Modeling the Dynamics of Trust in Automation Authors: Carlos Bustamante Orellana, Arizona State University; Lucero Rodriguez Rodriguez, Arizona State University; Lixiao Huang, Arizona State University; Nancy Cooke, Arizona State University; Yun Kang, Arizona State University	General Sessions Track Human Al
49. Perturbations Detection in Space-Based HMTs in Different Layers Authors: Elmira Zahmat Doost, Arizona State University	Robot Teaming (AI) Track Macroergonomics
50. Practical Considerations for Enabling Dynamic Human-AI Teaming Across Domains Authors: Adam Fouse, Aptima, Inc.; Gabriel Ganberg, Aptima, Inc.; Sylvain Bruni, Aptima, Inc.	Track Occupational Ergonomics Track
51. Preliminary Investigation of Communication Types and Strategies in Hat in Dynamic Dual-Task Situation	Student Forum Track
Authors: Sang-Hwan Kim, University of Michigan-Dearborn; Seungju Choi, University of Michigan, Dearborn; Dasol Han, University of Michigan, Dearborn; Yejin Lee, University of Michigan, Dearborn	Surface Transportation Track
52. Programming by Demonstration for Dual-Arm Manipulation Author: Karan Mudgal, Boston University	Sustainability Track
53. Quantifying Trust Evolution Through Predictability of Compliance Behavior: A Dynamical Systems Perspective Author: Matthew Peel, Arizona State University	System Development Track
54. Systematic Literature Review on Shared Leadership to Aid Collaboration and Task Allocation in Human-Autonomy Teams Authors: Anirudh More, Virginia Polytechnic Institute and State University; Nathan Lau, Virginia Polytechnic Institute and State University	
55. Team Error Management in Human Autonomy Teams Author: Ruihao Zhang, Arizona State University	
56. The Effectiveness of System-Wide Trust Repair Strategies in a Multi-Component Interface Author: Andrew Atchley, University of Alabama in Huntsville	
57. The Impact of Communication Timing and Sequencing on Team Performance: A Comparative Study of Human-AI and All-Human Teams Author: Shiwen Zhou, Arizona State University	
58. The Impact of Lifecycle Transparency on Human Autonomy Teaming Author(s): Mira Gruber, University of Central Florida	
59. U.S. Space Force Guardians on Multi-Agent Systems in Space: A Thematic Analysis of Interviews	
Author(s): Lydia Melles, George Mason University; Sara Scrapchansky, U.S. Air Force Academy; Samantha Miles, U.S. Air Force Academy; Kiara Morales, U.S. Air Force Academy; Chad Tossell, U.S. Air Force Academy; Ewart de Visser, U.S. Air Force Academy; Elizabeth Phillips, George Mason University	
60. Uncertainty Differences in Computing Hierarchical Pedestrian Behaviors Author(s): Zhengming Zhang, Purdue University; Renran Tian, North Carolina State University	
61. Virtual Reality Abdication: Systems for Robotic Teleoperation in Space and Other Dangerous Domains	
Author(s): Lydia Melles, George Mason University; Elizabeth Phillips, George Mason University	
62. Quantifying Trust Evolution Through Predictability of Compliance Behavior: A Dynamical Systems Perspective Author(s): Matthew Peel, Arizona State University	
	1

63. Discovering Functional Strength for Infants and Toddlers!	Poster
Authors: Monica Jones, University of Michigan; Sheila M. Ebert, University of Michigan, Carl Miller, University of Michigan; Brian Eby, University of Michigan; Miranda St. Amour, University of Michigan; Laura Malik, University of Michigan; Matthew P. Reed, University of Michigan	Aging Track Augmented Cognition Track
64. Identifying Parenting Challenges During the COVID-19 Pandemic: A Survey-Based Study Authors: Pratima Saravanan, Oklahoma State University; Nurul Ahad Choudhury, Oklahoma State	Children's Issues Track
University; Sachithra Karunathilake, Oklahoma State University	Communications Track
65. Investigating the Latency of an AI Driven Facial Expression Therapy System as a Function of Illumination and Eyeglasses	Cybersecurity Track
Authors: Korak Sengupta, San Jose State University	Education Track Environmental
66. Preliminary Findings on the Impact of Workload on Cardiopulmonary Resuscitation Quality for Pediatric Patients with Real-time Feedback Author: Tochi Oramasionwu, University of Toronto	Design Track General Sessions Track
67. Credible Emergence: Leveraging Bio-Behavioral Data in Agent-Based Models for Dynamic Trust	Human Al
Studies Authors: Morgan Klaeser, University of Wisconsin - Madison; Ranjana Mehta, University of Wisconsin - Madison	Robot Teaming (AI) Track Macroergonomics Track
68. Return On Investment Methods for Large-Scale Systems Interventions; Systems Thinking, How Much Does it Pay?	Occupational Ergonomics Track
Authors: Dan Nathan-Roberts, San Jose State University; Dave Moore, DMA	Student Forum Track
69. Using the IMPRINT Tool to Develop a Simulated Manpower Model for Navy Vessel Acquisition Authors: Joergen Eriksen, Naval Postgraduate School; Nita Shattuck, Naval Postgraduate School; Panagiotis Matsangas, Naval Postgraduate School; Christopher McClernon, Naval Postgraduate School; Frode Mjelde, Royal Norwegian Naval Academy	Surface Transportation Track Sustainability
70. An Investigation Into the Practicality of Employing Immersive Virtual Reality to Evaluate Ergonomic Risks Associated With the Peri-Care Task Authors: Richard Stone, Iowa State University; Fatima Mgaedeh, Iowa State University; Samer Alhebaishi, Iowa State University; Braden Westby, Iowa State University; Colten Fales; Varun Srikrishnan, Iowa State University	Track System Development Track
71. Can Exoskeletons Support Patient Handling Tasks Performed by Emergency Medical Technicians? Authors: Jangho Park, Clemson University; Jason Moats, Texas A&M University; Divya Srinivasan, Clemson University	
72. Computer Vision Embedded Post-Processing Algorithm on Lifting Risks Author: Denny Yu, Purdue University	
73. Digital Twin for Amputees: A Bidirectional Interaction Modeling and Prototype with Convolutional Neural Network Author(s): Junho Park, Santa Clara University	
74. Evaluating Practices to Reduce Work Related Injuries in Healthcare Workers: A Review Author(s): Jason Stoltz, University of Rhode Island; Caitlin Murray, University of Rhode Island; Jesse Duroha, University of Rhode Island	
75. Exoskeleton Use During Lifting Tasks May Impair Physical and Cognitive Performances Among Novice Users Author(s): Daniel Leibman, Texas Tech University; HeeSun Choi, Texas Tech University	
76. Field Assessment of Static Postures and the Frequency of Trunk and Upper Arms Movements	
Among Construction Workers Author(s): Micaela Porta, University of Cagliari	
77. How Effective are Exoskeletons at Reducing Muscular Demands During Repetitive Trunk Bending Tasks? Author(s): Pranav Madhav Kuber, Rochester Institute of Technology; Ehsan Rashedi, Rochester Institute of Technology	
78. Investigating Factors Influencing Construction Worker Productivity: The Case of the Middle East Author(s): Karim Zahed, American University of Beirut	

79. Investigating Manual Labor Workers' Perceptions of Exoskeletons using the Wearable Robot	Poster
Perception (WeaR-P) Questionnaire Authors: Yves Valentin, Texas Tech University; Thi Le, Texas Tech University; HeeSun Choi, Texas Tech	Aging Track
University	Augmented Cognition Track
80. Noise in the Vote-by-Mail Process: A California Case Study Authors: Leonie S. Otte, University of Rhode Island; Gretchen A. Macht, University of Rhode Island	Children's Issues Track
81. Package Delivered: Ergonomic Intervention for Delivery Drivers	Communications Track
Authors: Nicholas Horn, Embry-Riddle Aeronautical University; McKenna Tooker, Naval Postgraduate School	Cybersecurity Track
82. Relationship between Head Tilt Angle and Smartphone Tilt Angle	Education Track
Authors: Jiwon Ryu, Ulsan National Institute of Science & Technology; Gwanseob Shin, Ulsan National Institute of Science & Technology; Yunbeom Nam, Ulsan National Institute of Science & Technology	Environmental Design Track General Sessions
83. The Effects of Soft and Rigid Back Support Exoskeletons on Muscle Activity and User	Track
Perception During Simulated Automotive Assembly Authors: Zeinab Kazemi, Clemson University; Divya Srinivasan, Clemson University	Human Al Robot Teaming
84. The Readiness Level of Industry 4.0 Applications and Assistance to Workers: A Systematic	(AI) Track Macroergonomics
Literature Review Authors: Lucie Outlaw, Auburn University; Yadrianna Acosta-Sojo, Auburn University; Gregory Purdy,	Track Occupational Ergonomics Track
Auburn University; Mark Schall, Auburn University	Student Forum
85. Using Wearable Sensors and Deep Learning to Identify Origin and Destination of Lifts Authors: Yishu Yan, University of California, Berkeley; Jesse Jacobs, Risk Control Services, Liberty	Track Surface
Mutual Insurance; Alan Barr, University of California, San Francisco; Grace O'Connell, University of California, Berkeley; Carisa Harris Adamson, University of California, San Francisco	Transportation Track
86. Visual Analysis within Three-Dimensional Hand Scans to Define Hand Envelopes	Sustainability Track
Authors: Vanessa Segura Duque, University of Minnesota; Tse-Hsun Kuo, University of Minnesota; Kelsey Hitt, Toyota; Peeyush Kumar, Toyota; Dr. Linsey Griffin, University of Minnesota	System Development
87. Looking to the Future: Design of a Shore-Based Decision Support for Maritime Traffic	Track
Monitoring Author: Lilian Susanne Befort, Fraunhofer FKI	
88. An Analysis of Online Peer Support Groups for Informal Caregivers of Patients with Parkinson's	
Disease Authors: Sarvesh Sawant, Clemson University; Nandana Nair, Clemson University; Caroline Clayton,	
Clemson University; Anirudh Vemuri, Clemson University; Avantika Anoop, Clemson University; Agastya Sharma, Clemson University; Kapil Chalil Madathi, Clemson University	
89. Evaluating a Novel Measure to Parse the Sources of Subjective Cognitive Workload: The Task,	
Environment, Aid Scale Author(s): Frank Lodge, North Carolina State University; Anne Collins McLaughlin, North Carolina	
State University	
90. Human Response Performance to Vibrotactile Alerts: A Scoping Review Author(s): James Parkinson, Purdue University	
91. In ChatGPT we Trust: Foundations for an Empirically Determined Scale of Trust in Generative Ai	
Chatbots Author(s): Douglas Jonidis, North Carolina State University	
92. No Reaction to Distraction: An Investigation into Diminished Reality	
Author(s): Imani Murph, North Carolina State University; Anne Collins McLaughlin, North Carolina State University	
93. On Enhancing General Aviation Safety: The Integration of Generative AI in Preflight Weather	
Planning Author(s): Stephen Woods, Embry-Riddle Aeronautical University; Elizabeth Blickensderfer, Embry- Riddle Aeronautical University	
94. Perceptions of Autonomous Robot Teammates During Field Operations	
Author(s): Trevor Patten, North Carolina State University; Rachel Benton, North Carolina State University; Ericka Rovira, United States Military Academy; Susan Mohammed, Pennsylvania State	
University, Encka Rovira, Onned States Minitary Academy, Susan Mohammed, Pennsylvania State University; Anne Collins McLaughlin, North Carolina State University	

95. Running as a Woman: The Potential Impact of Geo-Tracking Technology on Perceptions of Safety in Trail Running	Poster Aging Track
Author: Rosemary O'Neal, North Carolina State University	Augmented
96. The Influence of Operator Trust on Human-Robot Interaction Within Teams Authors: <i>Heidi Segars, North Carolina State University; Anne Collins McLaughlin, North Carolina State</i>	Cognition Track Children's Issues
University; Ericka Rovira, U.S. Military Academy at West Point; Susan Mohammed, Pennsylvania State University	Track Communications Track
97. Transforming Learning: Assessing the Efficacy of an AI Psychology Tutor Built Using GPT-4	Cybersecurity
Turbo, Prompting, and Retrieval-Augmented Generation Author: Joseph J. Slade, Oregon State University	Track Education Track
	Environmental
98. A Evaluation Tool for the Real-Time Motion Sickness in Driving Environment Authors: Myung Hwan Yun, Seoul National University; Yein Song, Seoul National University; Jiyeon Shin, Seoul National University; Jungyeon Park, Seoul National University; Jaehoo Bae, Seoul National	Design Track General Sessions
University; Cai Wang, Seoul National University; Sangwoo Bahn, Kyung Hee University	Track Human Al
99. A Process for Deriving Heartrate Variability and its Comparison to Self-Reported Driver State Authors: Cal Heffernan, Ford Motor Company; Mansoor Nasir, Ford Motor Company; Ksenia Kozak, Ford Motor Company	Robot Teaming (AI) Track Macroergonomics Track
100. A Survey on Perceptions of Smartwatch Haptic Feedback for Enhancing Automated Vehicle	Occupational
Takeover Decisions Authors: Wei-Hsiang Lo, San Jose State University; Gaojian Huang, San Jose State University	Ergonomics Track Student Forum
101. A Systematic Review and Meta-Analysis of Older Adults' Cognitive Impairments and Effects on	Track Surface
Road Safety Authors: Yunru Zhang, Northeastern University; Wenchao Zhu, Northeastern University; Yan Xiao,	Transportation Track
University of Texas at Arlington; Arthur Kramer, Northeastern University; Yingzi Lin, Northeastern University	Sustainability Track
102. An Analysis of Detectability of Vulnerable Road Users Using Fuzzy Signal Detection Theory Authors : Wentong Yang, Nagoya University; Shota Matsubayashi, Nagoya University; Kazuhisa Miwa, Nagoya University; Shinya Kitayama, Denso Corporation; Manabu Otsuka, Denso Corporation; Koji Hamada, Denso Corporation	System Development Track
103. Angry Drivers, Please Calm Down: Regulating Driver Emotions to Enhance Driving Safety Authors: Saya Susindar, Texas A&M University; Thomas Ferris, Texas A&M University	
104. Assessing Meaningful Visual and Tactile Feedback for Effective Automated Vehicle Takeover by Hearing and Non-Hearing Drivers Authors: Aries Chu, San Jose State University; Wei-Hsiang Lo, San Jose State University; Gaojian	
Huang, San Jose State University	
105. Capturing the Mind: Non-Driving-Related Tasks as a Window into Cognitive Engagement in Automated Driving	
Author(s): Xiaolu Bai, North Carolina State University; Jing Feng, North Carolina State University	
106. Contextual Differences and Attentiveness in Urban Streets Author(s): Patricia Tice, ProFound Insights, Inc.; Peter Hancock, University of Central Florida; Sudipata dey Tirtha, University of Central Florida	
107. Driver Training and Socioeconomic Status: A Human-In-The-Loop Driving Simulator Evaluation Author(s): <i>Jeffrey Glassman, Old Dominion University</i>	
108. Effect of Caregiver Burden and Acute Stress on Driving Performance Author(s): Myriam Oliver; Patricia DeLucia, Rice University; Christopher P. Fagundes, Rice University	
109. Effects of Automation Exposure and Non-Driving Related Tasks on Manual Driving Performance after Takeover of Manual Control Author(s): LeGrand Dudley, Rice University; Patricia DeLucia, Rice University	
110. Effects of Automation Reliability on Driver Vigilance Author(s): Ashley Millard, Texas Tech University; Eric Greenlee, Texas Tech University;	
111. Is it Better Now? Using Swift Trust and Priming to Determine How Update Information Impacts Trust in Automation Author(s): Scott Mishler, Old Dominion University; Jing Chen, Rice University	

112. Looking Back on Forward Collision Warnings: A Review of Perception Response Times from	Poster
Empirical Studies	Aging Track
Authors: liona Scully, Exponent, Inc.; Peter Shlanta, Exponent, Inc.	Augmented
113. Managing Attention During Virtual Meetings in Partially-Automated Vehicles Author: David Prendez, University of Washington	Cognition Track Children's Issues Track
114. Simultaneous Remote Monitoring of Multiple Automated Vehicles Authors: Lane Shoffner, North Carolina State University; Jing Feng, North Carolina State University	Communications Track
115. The Intersection of Voice Assistants and Autonomous Vehicles: A Scoping Review Authors: Aries Chu, San Jose State University; Gaojian Huang, San Jose State University	Cybersecurity Track
Authors. Aries Chu, San Jose State Oniversity, Gaojian Huang, San Jose State Oniversity	Education Track
116. Use of Remote Focus Groups to Improve Inclusive Design Practice Authors: Elham Entezarizarch, University at Buffalo; Victor Paquet, University at Buffalo; Jordana	Environmental Design Track
Maisel, University at Buffalo	General Sessions Track
117. Workload Estimation Using Facial Expression Analysis Authors: Kayla Riegner, US Army Ground Vehicle System Center; Christopher Mikulski, US Army Ground Vehicle System Center	Human Al Robot Teaming (Al) Track
118. Human Factors and Sustainability: The New Sustainability Technical Group Welcomes	Macroergonomi Track
Collaborations Authors: Daniel Gottesman, STG; Amrita Maguire, Dell Technologies	Occupational Ergonomics Trac
119. Integrating Positive Train Control (PTC) with Grade Crossing Systems for Enhanced Rail Safety	Student Forum Track
Yalda Khashe, University of Southern California; John Ferrant, University of Southern California; Alex Wang, University of Southern California	Surface Transportation Track
	Sustainability Track
	System Development Track

FRIDAY, SEPTEMBER 13	
8:30-9:30 a.m.	
PD5: User-Focused Design FLW Salon A Session Chair: Karim Zahed (Texas A&M University)	Industry/ Practitioner Case Study Lecture
User-Centered Design in the Face of Limited User Access Authors: Dr. Werner Born, Aptima, Inc.; Isabel Erickson, Aptima, Inc.; Susannah Hoch, Aptima, Inc.;	Product Design Track
Assessing the Individual Experience of Comfort Authors: Missie Smith, Meta; Saman Madinei, Meta;	
Towards the Design of an Ultra-Light Car Seat with a Reclining Back Rest Author: Peter Vink, Delft University of Technology;	
EDU6: What Does It Mean To Be Inclusive? A Conversation With the HFES Council of Affinity Groups (COAG) FLW Salon B Session Chair: Dominique Engome Tchupo (University of Rhode Island)	Discussion Panel Education Track
What Does it Mean to be Inclusive? A Conversation with the HFES Council of Affinity Groups (COAG) Authors: Myounghoon Jeon, Virginia Tech; Jules Trippe; Myke Cohen, Arizona State University; Jay Kim, Oregon State University; Abigail R. Wooldridge, University of Illinois Urbana-Champaign; Heather C. Lum, Arizona State University;	

CEDM11: Cognition in Training and Learning FLW Salon C	Lecture Cognitive
Session Chair: James Hughes (University of Connecticut)	Engineering & Decision Making Track
Gender-Related Preferences for Learning by Tinkering: Time for an Update? Authors: Amanda K. Newendorp, Iowa State University; Stephen B. Gilbert, Iowa State University;	ITACK
Assessing the Relationship Between Learning Stages and Prefrontal Cortex Activation in a Psychomotor Task Authors: Kendric Ortiz, University of New Mexico; Jacob Hunter, Purdue University; Adam Thorpe, University of Texas at Austin; Madeleine Yuh, Purdue University; Tahira Reid, Pennsylvania State University; Neera Jain, Purdue University; Meeko Oishi, University of New Mexico;	
Online Self-Confidence Calibration for Improving Learning Outcomes via Intelligent Tutoring Systems Authors: Madeleine Yuh, Purdue University; Neera Jain, Purdue University;	
USE8: Usability Potpourri <i>FLW Salon D</i> Session Chair: Susan Kotowski (University of Cincinnati)	Lecture Usability and System Evaluation Track
Measured Perceived Quality in Vehicle Cockpit Interiors Using Virtual Reality Authors: Sukayna Hamka, University of Michigan, Dearborn; Nishanth Prabhu Kurunthachalam, University of Michigan, Dearborn; Sang-Hwan Kim, University of Michigan, Dearborn	
Ideal Connected Home Configurations: Insights from Expert Users Authors: Shabnam FakhrHosseini, Massachusetts Institute of Technology; Matthew Milton, Massachusetts Institute of Technology; Chaiwoo Lee, Massachusetts Institute of Technology; Joseph Coughlin, Massachusetts Institute of Technology	
Impacts of Medical Webpage Usability on Patient Decision Making Author: Ruihao Zhang, Arizona State University	
ST15: Driver Perception in Traffic Modeling, Roadway Designs, and Cyclist Interactions FLW Salon G Session Chair: Sibibalan Jeevanandam (Purdue University); Wei-Hsiang Lo (San Jose State University)	Lecture Surface Transportation Track
The Geometric Scale of an Urban Space—Neuro-Perceptual Limitations for Face-to-Face Driver Behavior Authors: Patricia Tice, ProFound Insights, Inc.; Peter Hancock, University of Central Florida	
Efficiency of Group Movement Within Human Risk Perception Author: Shota Matsubayashi, Nagoya University	
Effects of Cell Phone Conversation on Drivers' Perceptions of Cyclists' Intentions Authors: Christine Petersen, Rice University; Patricia DeLucia, Rice University	
OE12: Exoskeleton IV FLW Salon H Session Chair: Jay Kim (Oregon State University)	Lecture Occupational Ergonomics Track
Predicting Perceived Back Fatigue During Exoskeleton Supported Trunk Bending Tasks Using Machine Learning Authors: Pranav Madhav Kuber, Rochester Institute of Technology; Abhineet Rajendra Kulkarni,	
University of Florida; Ehsan Rashedi, Rochester Institute of Technology	1
University of Florida; Ehsan Rashedi, Rochester Institute of Technology The Impact of Wearing an Arm Support Exoskeleton on Balance During a Step-Down Maneuver Authors: Dr. Federico Arippa, University of Cagliari; Dr. Alan Barr, University of California, Berkeley; Dr. Brandon Phillips, University of California, Berkeley; Dr. Sunwook Kim, Virginia Tech; Maury A. Nussbaum, Virginia Tech; Carisa Harris-Adamson, University of California, Berkeley	

XR8: The Eyes Have It: Visual Considerations in Extended Reality FLW Salon I	Lecture Extended Reality Track
Session Chair: Chidubem Nuela Enebechi (Purdue University); Jasmine Roberts (Microsoft)	THER
Time Pressure Detection in a Visual Search Task Using Eye Tracking Metrics: A Virtual Reality Study Authors: Mohamad El Iskandarani, University of Virginia; Sara Lu Riggs, University of Virginia; Jad Atweh, University of Virginia	
Improving Task Performance in Robotic Teleoperation Using 3D Visual Cues Authors: Eshwara Prasad Sridhar, University of Texas at Arlington; Vibhav Nirmal, University of Texas at Arlington; Mahmudur Rahman, University of Texas at Arlington	
Using Eye-Tracking to Evaluate Novel Augmented Reality Applications for Maritime Operations Authors: Dr. Steven Mallam, Memorial University of Newfoundland; Amin Attarzadeh, Memorial University of Newfoundland; Akash Samanta, Memorial University of Newfoundland; Ankan Bhattacharjee, Memorial University of Newfoundland	
PP10: Discriminator: Exploring Highlighting Techniques in Vast Natural Image Databases <i>FLW Salon J</i>	Demo Perception and Performance
Discriminator: Exploring Highlighting Techniques in Vast Natural Image Databases Authors: Zeth duBois, University of Idaho; Steffen Werner, University of Idaho	Track
HC17: Workload in Healthcare Grand Ballroom	Lecture Health Care Track
Session Chair: Md Shafiqul Islam (Virginia Polytechnic Institute and State University)	
A Safety II Approach to NICU Nursing Workload: Unanticipated Workload Challenges and Self- Initiated Mitigation Strategies Author: Lamia Alam, Johns Hopkins University	
Identifying Emergency Physicians' Strategies for Mitigating Workload Transfers during Inter-Shift Patient Handoffs - A Qualitative Analysis Authors: Steven Foster, Clemson University; Sudeep Hegde, Clemson University	
Scheduled or Self-Determined: Evaluating the Optimal Implementation of the OR-Stretch, an Intraoperative Microbreak for Surgeons Author: <i>Hamid Norasi, Mayo Clinic</i>	
8:30-10:45 a.m.	1
Human Factors Extended Reality Showcase Flagstaff Session Chairs: Stephanie Fussell (Kent State University); Randall Spain (U.S. Army DEVCOM Soldier Center)	Demonstrations Extended Reality Track
Human Factors Extended Reality Showcase Authors: Randall Spain, US Army DEVCOM; Stephanie Fussell, Kent State University; Karen Chen, NCSU; Jessyca Derby, Design Interactive; Lilian Garza, Explico; Fangyuan Cheng, NCSU	
9:45-10:45 a.m.	
SU3—Roundtable Discussions: Are Humans Still Necessary? FLW Salon A Session Chair: Julie Gilpin-McMinn (Spirit AeroSystems)	Discussion Panel Sustainability Track
Roundtable Discussions: Are Humans Still Necessary? Authors: Judi E. See, Sandia National Laboratories; Julie Gilpin-Mcminn, Spirit AeroSystems	

LBR4: Late-Breaking 4	Late-Breaking Results
<i>FLW Salon B</i> Session Chair: Krystyna Gielo-Perczak (University of Connecticut); Vickie Nguyen (Bold Insight)	Lectures
Innovation and Technology Adoption in Community Hospitals: A Human Factors Based Investigation Authors: Sana Allana, University of Waterloo; Luiza Dos Santos, Federal University of Rio de Janeiro; Ayesha Waseem, University of Waterloo; Carla Girolametto, Grand River Hospital; Catherine Burns, University of Waterloo;	
Approaches to Decision Making Vary Across Types of Emergent Patient Scenarios Authors: Shilo Anders, VanderbiltUniversity Medical Center; Megan Salwei, Vanderbilt University Medical Center; Duran (Tram) Huang, University of Pittsburgh; Carrie Reale, Vanderbilt University Medical Center; Laura Militello, Applied Decision Science, LLC; Christen Sushereba, Applied Decision Science, LLC; Janelle Faiman, Vanderbilt University Medical Center; Meredith Kingeter, Vanderbilt University Medical Center; Elizabeth Sinz, West Virginia University; Jeffery Cooper, Harvard Medical School; Amanda Burden, Cooper Medical School of Rowan University; Michael Andreae, University of Utah School of Medicine; John Rask, University of New Mexico; Laurence C Torsher, Mayo Clinic; Arna Banerjee, Vanderbilt University Medical Center; Adam I Levin, Mt Sinai School of Medicine; David Gaba, Stanford University; Jason Slagle, Vanderbilt University Medical Center; Matthew B Weinger, Vanderbilt University Medical Center	
Optimization of the Design of NIV Pediatric Masks through Anthropometric Analysis at Different Ages Authors: Vanessa Segura-Duque, University of Minnesota; Linsey Griffin, University of Minnesota;	
Use Forces by Interventional Cardiologists: Filling Gaps in Force Data for Catheter-Based Cardiovascular Device Design Authors: Grainne Tyrrell, Health Research Institute, University of Limerick; Eoin White, University of Limerick; Leonard O'Sullivan, University of Limerick; Donna Curley, Medtronic;	
Exploring the System-of-use and Stakeholder Needs and Barriers for Pediatric Non-invasive Devices within Inpatient and Outpatient Healthcare Systems Authors: Emily Seifert, University of Minnesota;Linsey Griffin, University of Minnesota; Gwenyth Fischer, University of Minnesota Masonic Children's Hospital; Lexie Goertzen, University of Minnesota Masonic Children's Hospital	
Relationship Between Anthropometric Traits and Perceived Fit, Comfort, and Adjustability in Shoulder and Back Exoskeletons among Female Users Authors: Hanwen Wang, Texas A&M University; Hongwei Hsiao, Texas A&M University;	
CEDM12: Decision Making FLW Salon C Session Chair: Deborah Asabere (The Ohio State University)	Lecture Cognitive Engineering & Decision Making
Evaluation of Risk Shift Between Individuals and Teams in an Operational Task Authors: Hannah Ragsdale Lee, Iowa State University; Michael Dorneich, Iowa State University	Track
Decision Fatigue Framework: Unveiling the Causes and Consequences of Decision Fatigue through Systematic Review Authors: Pratima Saravanan, Oklahoma State University; Nurul Ahad Choudhury, Oklahoma State University	
Detail Matters: Drivers' Responses to Flood Warnings in Simulated Driving Authors: Katherine Garcia, Rice University; Jing Chen, Rice University	

T5: Enhancing Training Through Technology	Lecture
FLW Salon D	Training Track
Session Chair: Jayde King (U.S. Air Force Research Laboratory)	
Enhancing Colonoscopy Training Through Simulation-Based Learning: Designing and Evaluating an Interactive Graphical User Interface Authors: Isra Elsaadany, Pennsylvania State University; Hang Ling, Pennsylvania State University; Okba Alenezy, Pennsylvania State University; Divyaa Vivekanandan, Pennsylvania State University; Jessica Gonzalez-Vargas, Pennsylvania State University; Jason Moore, Pennsylvania State University; Scarlett Miller, Pennsylvania State University	
Unlocking the Potential of Augmented Reality: Investigating its Impact on Laparoscopic Training Authors: Isra Elsaadany, Pennsylvania State University; Jessica Gonzalez-Vargas, Pennsylvania State University; Jason Moore, Pennsylvania State University; Scarlett Miller, Pennsylvania State University	
Implementation and Evaluations of Visual Scaffolding to Support Attentional Management Training Authors: Angelia Sebok, TiER1 Performance; Noah Kreischer, Atlas Air; Christopher Wickens, Colorado State University; Benjamin Clegg, Montana State University	
ST16: Novel Methods for Vehicle Designs, Interactions, and Accident Analysis FLW Salon G Session Chair: Jing Zang (Purdue University); Gayoung Ban (Virginia Polytechnic Institute and State University)	Industry/ Practitioner Case Study Lecture Surface Transportation Track
A Queuing Model Based Rapid Evaluation Method for Automotive Control Design Authors: Xiaolin Zuo, Beijing Institute of Technology; Jiawei Pan, Tsinghua University; Changxu Wu, Tsinghua University	
Analyzing Human-Automation Interdependence Based on the Teammate, Situational Properties, and Interaction Sequence Authors: Hansol Rheem, University of Wisconsin – Madison; Joonbum Lee, University of Wisconsin – Madison; John D. Lee, University of Wisconsin – Madison; Joshua E. Domeyer, Toyota Collaborative Safety Research Center	
An Integrated Approach to Visualizing a Nighttime Accident Scene for Human Factors Analysis Authors: David Fortenbaugh, Esi; Katie Zakutansky, Esi; Manolo Meza-Arroyo, Esi; Dan Kruger, Esi;	
OE13: Workplace Improvements FLW Salon H Session Chair: Suman Chowdhury (Texas Tech University)	Lecture Occupational Ergonomics Tracl
Modifying Extension Ladder Configurations Improve Stepping Safety During Climbing Authors: Violet Williams, University of Pittsburgh; Mark Redfern, University of Pittsburgh; Kurt Beschorner, University of Pittsburgh	
Field Testing of the EMS LiftKit: A R2P Study Authors: Steve Lavender, The Ohio State University; Carolyn Sommerich, The Ohio State University; Anas Kachlan, The Ohio State University	
Mayo Clinic's Alignment to MNOSHA's 2023 Ergonomics Statute Author: Nicholas Smith, Mayo Clinic	

 SF3: Ethical and Educational Considerations in Technology FLW Salon I Session Chair: Sylvain Bruni (Aptima, Inc.) Investigating the Impact of College Students' Stress on Heart Rate Behaviors and Rhythms Authors: Farzan Sasangohar, Texas A&M University; Samira Ziyadidegan, Texas A&M University; Amir Hossein Javid, Texas A&M University Examining the Ethical Considerations of Humanitarian Drones Authors: Savannah Bradley, Arizona State University; Erin Chiou, Arizona State University 	Lecture Student Forum Track
Improving Pedestrian Conspicuity at Night: Testing the Efficacy of an Educational Intervention Authors: Morgan McCree, Clemson University; Richard Tyrrell, Clemson University; Joanne Wood, Queensland University of Technology; Patrick Rosopa, Clemson University	
S7: Systems Approach to Safety and Learning <i>FLW Salon J</i> Session Chair: Atif Ashraf (Texas A&M University); Olugbenga Gideon (University of Idaho, Idaho National Laboratory)	Lecture Safety Track
Identification of Organizational Factors Affecting the Safety of Operations: Foundation for Extending Human Reliability Analysis Methods Authors: Maryam Tabibzadeh, California State University, Northridge; Davit Zaratsyan, California State University, Northridge; Hoda Jafary, University of California, Los Angeles; Tingting Cheng, University of California, Los Angeles; Marilia Ramos, University of California Los Angeles; Ali Mosleh, University of California, Los Angeles	
Evaluating the Effectiveness of Game-Based Learning for Long-Term Knowledge Retention Authors: Sameeran Kanade, Purdue University; Sogand Hasanzadeh, Purdue University; Brandon Pitts, Purdue University; Behzad Esmaeili, Purdue University; Vincent Duffy, Purdue University	
Evaluating Safety Concerns for Pediatric Mental and Behavioral Health Patients and Providers in the Emergency Department: A Systems Perspective Authors: Sahar Mihandoust, Clemson University; Anjali Joseph, Clemson University; Ann Dietrich, Prisma Health; Mina Shokrollahi Ardekani, Clemson University; Devi Soman, Clemson University; Monica Gripko, Clemson University	
HART16: Robots and Human-Al-Robot Teaming Grand Ballroom Session Chair: Anirudh More (Virginia Polytechnic Institute and State University)	Lecture Human AI Robot Teaming (AI) Track
Exploring Cognitive Workload Changes in Teleoperators: Collaboration with On-Site Workers and Robots in Assembly Tasks Authors: Saman Jamshid Nezhad Zahabi, Virginia Polytechnic Institute and State University; Sakshi Taori, Virginia Polytechnic Institute and State University; Sunwook Kim, Virginia Polytechnic Institute and State University; Sol Lim, Virginia Polytechnic Institute and State University	
Evaluating Human-Robot Teaming Strategies for Disaster Response Operations with a Functional Network Model of Work Authors: Salvatore Hargis, The Ohio State University; Martijn IJtsma, The Ohio State University	
Let's Get Physical: The Influence of Embodiment on Industrial Human-Robot Interaction Authors: Johanna zu Putlitz, Technische Universität Berlin; Eileen Roesler, George Mason University	

11:00 a.m12:00 p.m.	
Unconference FLW Salon E/F	Special Session
Join fellow attendees in a casual setting to share what you are grateful for and recognize your peers! This session will start with an interactive feedback session using the KISS framework (Keep, Improve, Start, Stop) for ASPIRE attendees to share how the event can be bettered for 2025. The second half of the session invites all to come and share what you are grateful for and recognize your peers! From expressing pride in completing a large human factors study or signing a big client for your practice, to submitting your thesis or dissertation or delivering a new human-centered product to market, let HFES members know what brightens your professional life. Recognize your colleagues and partners for their accomplishments and service to our professional field. Unsung heroes and those working behind the scenes deserve their time in the spotlight. This is it! Every participant will earn a commemorative Unconference Kudos pin and those recognized by their peers will receive a small gift as a token of appreciation from a grateful community.	



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