



2026

IHSI

International

9th International Conference on

Intelligent Human Systems Integration: Disruptive & Innovative Technologies (IHSI 2026)

February 11-13, 2026

Università degli Studi di Firenze
Florence, Italy

Final Program

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IHSI 2026

Conference Reception

WEDNESDAY, FEBRUARY 11, 2026 - 19:30 - 22:00 (CET)

RECEPTION LOCATION:

RESTURANTE FLORENCE B-ROOF

Address: Piazza dell'Unità Italiana, 6, 50123 Firenze FI, Italy
(DRESS IS BUSINESS CASUAL, REGISTERED PARTICIPANTS, PHOTO ID REQUIRED)

Conference Organization

CONFERENCE ADMINISTRATOR:

ADMIN@IHSINT.ORG

Technical Sessions: Thursday - Friday, Feb 12-13, 2026

Conference Location: : Università degli Studi di Firenze - Plesso Santa Teresa
Address: Via della Mattonaia, 14, 50121 Firenze FI, Italy

Conference Organizing Co-Chairs:

Tareq Ahram, USA

Waldemar Karwowski, USA

Conference Host Co-Chairs:

Laura Giraldi, Italy

Elisabetta Benelli, Italy

Scientific Tracks

IHSI 1	Automotive Design and Transportation Engineering
IHSI 2	Humans and Artificial Cognitive Systems
IHSI 3	Intelligence Technology and Analytics
IHSI 4	Computational Modeling and Simulation
IHSI 5	Humans and Artificial Systems Complexity
IHSI 6	Smart Materials and Inclusive Human Systems
IHSI 7	Industrial Engineering and Operations
IHSI 8	Human-Centered Interaction and Experience

Conference at a Glance

Thursday, February 12, 2026

#	SESSION TITLE	ROOM	TRACK
Day 1: Thursday, February 12 - Session Time: 9:00 – 10:00 CET			
	Plenary Speech and Opening Session	1	ALL
10:00 - 10:30 • Sessions Break			
Day 1: Thursday, February 12 - Session Time: 10:30 - 11:30 CET			
1	Transportation Engineering: Automotive Design	1	IHSI 1
2	Humans and Artificial Cognitive Systems I	2	IHSI 2
3	Intelligence, Technology and Analytics I	3	IHSI 3
11:30 - 12:00 • Sessions Break			
Day 1: Thursday, February 12 - Session Time: 12:00 - 13:00 CET			
4	Computational Modeling and Simulation: Object Tracking...	1	IHSI 4
5	Humans and Artificial Systems Complexity I	2	IHSI 5
6	Inclusive Human Systems I	3	IHSI 6
13:00 - 13:30 • Sessions Break			
Day 1: Thursday, February 12 - Session Time: 13:30 - 14:30 CET			
8	Applications and Future Trends: Learning and Training I	1	IHSI 8
9	Humans and Artificial Cognitive Systems II	2	IHSI 2
End of Day 1 Sessions			

Friday, February 13, 2026

10	Intelligence, Technology and Analytics II	1	IHSI 3
11	Humans and Artificial Systems Complexity II	2	IHSI 5
12	Inclusive Human Systems II	3	IHSI 6
10:00 - 10:30 • Sessions Break			
Day 2: Friday, February 13 - Session Time: 10:30 - 11:30 CET			
13	Inclusive Human Systems III	1	IHSI 6
14	Workshop: Model-based Stakeholder-driven Exploration and Design of Human-Autonomy/AI Teaming	2	IHSI 7
15	Applications and Future Trends: Digital Inclusion and Interpretable...	3	IHSI 8
11:30 - 12:00 • Sessions Break			
Day 2: Friday, February 13 - Session Time: 12:00 -13:00 CET			
16	Humans and Artificial Systems Complexity III	1	IHSI 5
18	Human Systems Integration: Interaction and User Experience	2	IHSI 8
19	Applications and Future Trends: Learning and Training II	3	IHSI 8
13:00 - 13:30 • Sessions Break			
Day 2: Friday, February 13 - Session Time: 13:30 - 14:30 CET			
20	Human-Centered Interaction and Experience I	1	IHSI 8
21	Human-Centered Interaction and Experience II	2	IHSI 8



Scientific Program

Thursday Feb 12, 2026

9:00 - 10:00 Plenary Session

DAY 1

IHSI 2026 Conference Scientific and Technical Program

Location: Università degli Studi di Firenze - Plesso Santa Teresa

Address: Via della Mattonaia, 14, 50121 Firenze FI, Italy

Welcome and Opening remarks

**Thursday
Feb 12**

Plenary Session and Opening Speech

Session Chairs: Laura Giraldi and Elisabetta Benelli, Università degli Studi di Firenze, Italy

9:00 - 10:00
(CET)

Keynote Speech: "The Implementation of Artificial Intelligence in Transportation"

Speaker: Dimitrios Ziakkas, Purdue University, USA

10:00 - 10:30 • Sessions Break

Day 1 Technical Sessions

10:30 - 11:30 Technical Sessions

DAY 1

IHSI 1

Room 1

SESSION 1

Transportation Engineering: Automotive Design

**Thursday
Feb 12**

Session Chair(s): Tianyu Tang and Rüdiger Heimgärtner, Germany

10:30 -
11:30 (CET)

Interactive Driving Turing Test with Think-Aloud Protocol: How Realistic Are Behavioural Driver Models?

Tianyu Tang, Tobias Zillmann, Johan Olstam, Christer Ahlström, Fredrik Johansson, Wouter Schakel, Klaus Bengler, Germany

Intercultural Human-Centred AI for Automotive Systems: Bridging ASPICE Processes and Intelligent Human Systems Integration

Rüdiger Heimgärtner, Germany

Visual Feedback for In-Car Voice Assistants

Thomas Marinissen, Pavlo Bazilinskyy, Netherlands

AI and Automotive Design: The Ferrari Case as a Model of Human-Machine Co-Creation

Elisabetta Benelli, Laura Giraldi, Francesca Filippi, Italy

Beyond Ridership Counts: What Trip Requests Reveal About Urban Mobility

Waldemar Titov, Thomas Schlegel, Germany

DAY 1	IHSI 2	Room 2
SESSION 2	Humans and Artificial Cognitive Systems I	
Thursday Feb 12	Session Chair(s): James Helfrich, United States and Kyoko Ito, Japan	
10:30 - 11:30 (CET)	<p>Artificial Intelligence Maturity Model (AIMM) James Helfrich, Chris Mijangos Xicara, United States</p> <p>An Experimental Study on Consensus Building with an AI Chatbot Across Two Topics Kyoko Ito, Kiyokazu Ujiie, Japan</p>	
	<p>An Agent-Based Simulation Framework for ADHD: Modeling Attention Regulation and Adaptive Therapeutic Interventions Valentina Ezcurra, Ancuta Margondai, Cindy Von Ahlefeldt, Anamaria Acevedo Diaz, Soraya Hani, Julie Rader, Nikita Islam, Sara Willox, Mustapha Mouloua, United States</p> <p>CRMSON: Co-Designing Adaptive and Ethical AI Systems to Address Mental Health Barriers in Aviation Kimberly Perkins, Fabio Mattioli, United States</p>	
	<p>Open-Ended Versus Closed Questions in an LLM-Based Job Interview Nirit Gavish, Ido Izraellov, Israel</p>	
	<p>Usability Evaluation of FAIR Data Planning in the Data Stewardship Wizard Josef Pavlicek, Petra Pavlickova, Czech Republic</p>	
	<p>Seeing the Invisible Load: XR and Multimodal Sensing for Cognitive Ergonomics in Industrial Training Jessica Johnson, Andwele Grant, United States</p>	
DAY 1	IHSI 3	Room 3
SESSION 3	Intelligence, Technology and Analytics I	
Thursday Feb 12	Session Chair(s): Taiki Matsunaga and Hiroshi Shimoda, Japan	
10:30 - 11:30 (CET)	<p>Designing an Experimental Method for Evaluating Divergent Thinking with a Color Queue under Time Constraints Taiki Matsunaga, Ryunosuke Fukada, Kimi Ueda, Hirotake Ishii, Hiroshi Shimoda, Japan</p> <p>Designing Experiments to Explore Optimal Timing for Refreshing Breaks During Cognitive Tasks Using Time-Series Changes Reika Abe, Masato Yamazaki, Kimi Ueda, Hirotake Ishii, Hiroshi Shimoda, Fumiaki Obayashi, Japan</p>	
	<p>The Effect of Fading-In Light Transitions to Induce Micro-Refresh on Intellectual Work Masato Yamazaki, Reika Abe, Kimi Ueda, Hirotake Ishii, Hiroshi Shimoda, Fumiaki Obayashi, Japan</p>	

Exploring Privacy in Digital Mental Health: User and Psychotherapist Perspectives
Abdulmajeed Alqhatani, Saudi Arabia

Fake Aircraft, Real Threats: Training Air Traffic Controllers for Cyberattacks

Maria Hagl, Supathida Boonsong, Tim H Stelkens-kobsch, Tim Ruediger, Andrei Gurto, Gurjot Singh Gaba, Germany

TEE Protected Drone Inspection for Critical Infrastructure: Securing Edge Analytics and Trust at Scale

Yongzhi Wang, United States

11:30 - 12:00 • Sessions Break

Day 1 Technical Sessions

12:00 - 13:00 Technical Sessions

DAY 1

IHSI 4

Room 1

SESSION 4

Computational Modeling and Simulation: Object Tracking and System Design

**Thursday
Feb 12**

Session Chair(s): Soraya Hani and Julie Rader, United States

12:00 -
13:00 (CET)

When to Trust the Machine: A Simulation Framework for Human–AI Collaboration

Soraya Hani, Ancuta Margondai, Sara Willox, Cindy Von Ahlefeldt, Valentina Ezcurra, Anamaria Acevedo Diaz, Nikita Islam, Mustapha Mouloua, United States

Conditioned to Interact: A Computational Simulation of Pavlovian-Instrumental Transfer in Intelligent System Design

Julie Rader, Ancuta Margondai, Sara Willox, Soraya Hani, Nikita Islam, Valentina Ezcurra, Mustapha Mouloua, United States

A Hybrid Large Language Model–Reinforcement Learning Framework for Cognitively-Based Robotic Generalisation and Intelligent Problem Solving

Jovan Hartono, Parith Avasadanond, Kenneth Lim, Singapore

Human-Centered Harmonic Analysis of the Beatles' Yesterday: Chord Wheel, Process Diagrams, and Eye-Tracking Insights

Josef Pavlicek, Czech Republic

Improving the accuracy of automatic object tracking by using posture recognition

Satoru Inoue, Mark Brown, Tomofumi Yamada, Japan

AI-Driven Text-to-Speech for Non-Playable Characters in XR Educational Environments

Sylker Silva, Isabelli Oliveira, Rodrigo Costa, Brazil

DAY 1**IHSI 5 Room 2****SESSION 5****Humans and Artificial Systems Complexity I****Thursday Feb 12****Session Chair(s): Stefan Pickl, Germany and Masayuki Ihara, Japan**

12:00 - 13:00 (CET)

Strategic Defense against Hybrid Threats under Emerging Disruptive Technologies: A Stochastic Modeling Framework
Stefan Klug, Jonas Schmäck, Maximilian Moll, Stefan Pickl, Germany

How should we design AI tools that handle personal information? Evaluating AI-generated personalized care advice based on deeply personal data

Masayuki Ihara, Hiroko Tokunaga, Tomomi Nakashima, Hiroki Goto, Yuuki Umezaki, Yoko Egawa, Shinya Hisano, Takashi Minato, Yutaka Nakamura, Shinpei Saruwatari, Japan

Mission management in human autonomy teams – an HMI design concept for managing multiple uncrewed aerial systems from a fighter cockpit

Johannes Maria Ernst, Birte Thomas-Friedrich, Max Friedrich, Germany

Hybrid Human–AI Interaction in Game-Theoretic Corporate Governance: Matching ESG Targets with Overarching Sustainable Development Goals

Roberto Moro-visconti, Italy

Distance Estimation in a Telepresence Scenario Using a 360° Monoscopic Camera, an AGV and an HMD

Nick Weidensager, Jennifer Brade, Sven Winkler, Franziska Klimant, Philipp Klimant, Germany

Career Design for Discovering Meaningful Work: A Narrative and Meaning Innovation Approach

Hiroyuki Yanase, Japan

DAY 1**IHSI 6 Room 3****SESSION 6****Inclusive Human Systems I****Thursday Feb 12****Session Chair(s): Paul Weiser, Germany and Sevinç Serpil Aytac, Turkey**

12:00 - 13:00 (CET)

From Human Systems Integration to Human Systems Migration: First sketch from the automated driving system project MiRoVA

Frank Flemisch, Tassilo Ianniello, Paul Weiser, Justin Osmanov, Tianyu Tang, Kai Storms, Can Kemmler, Marvin Baumann, Bettina Abendroth, Klaus Bengler, Steven Peters, Peter Vortisch, Germany

Harnessing Emerging Technologies to Enhance Decision-Making in Competency-Based Training and Assessment

Debra Henneberry, Dimitrios Ziakkas, Ioanna Lekeia, Konstantinos Pechlivanis, United States

Human-Centered Safety and Ergonomic Design for Women in High-Risk Industrial Occupations: A Systematic Review within Intelligent Systems Context

Sevinc Serpil Aytac, Hüsre Gizem Akalp, Nurettin Yamankaradeniz, Nuran Bayram Arli, Turkey

Latency, Sensitivity & Optimizing Workload in Drone Control: Neuroergonomic and Neurodiverse Insights for Equitable, Therapeutic, and Inclusive Action

Suvipra Singh, Charlotte Geary, United States

Regulatory Pathways for Inclusive Human Systems in Aviation: Embedding Ethics and Emerging Technologies into Global Oversight

Dimitrios Ziakkas, Debra Henneberry, Anastasios Plioutsias, Greece

Risk Modelling of Human–Machine Interactions in Remote Controlled Ship

Muhammad Irsyad Bin Hasbullah, Gerasimos Theotokatos, United Kingdom

13:00 - 13:30 • Sessions Break

Day 1 Technical Sessions

13:30 - 14:30 Technical Sessions

DAY 1	IHSI 8	Room 1
SESSION 8	Applications and Future Trends: Learning and Training I	
Thursday Feb 12	Session Chair(s): Colleen Duffy, United States and Kazuhiko Yamazaki, Japan	
13:30 - 14:30 (CET)	Examining the Impact of AI on Schema and Scaffolding in Educator Preparation Colleen Duffy, United States	
	Implementing Vision in Society through Brand Experience: A Multi-layered Framework and Case Studies kazuhiko yamazaki, Japan	
	Navigating the Artificial Intelligence Landscape in Higher Education: A Human-Centered Approach to Integrating Technology for Enhanced Learning Jodi Loughlin, United States	
	"The Vision Picnic": A Metaphor-Driven Workshop Framework for Personal Vision-Making through Collaborative Self-Exploration Toshiya Sasaki, Japan	
	Promoting Pro-Environmental Behavior through Anticipated Emotions: A Preliminary Study Using an Episodic Recall Task to Encourage Positive Outcome Expectations Wataru Ogomori, Shunya Tanaka, Kimi Ueda, Hirotake Ishii, Hiroshi Shimoda, Japan	

DAY 1	IHSI 2	Room 2
SESSION 9	Humans and Artificial Cognitive Systems II	
Thursday Feb 12	Session Chair(s): Sven Hinrichsen, Germany and Elena Cavallin, Italy	
13:30 -14:30 (CET)	<p>Conceptual Framework for Designing Domain-Specific LLM-Based Information Systems Dominik Ullrich, Jens Wallys, Sven Hinrichsen, Germany</p> <p>Shaping Conversations: Custom GPTs to Spark Reflection in Design Elena Cavallin, Simone Spagnol, Italy</p> <p>Privacy at the Core: Toward Automated Detection of Privacy-Sensitive Content in an LLM-Based Care Documentation Support System Reinhard Kletter, Sabine Theresia Koeszegi, Austria</p> <p>Understanding the Digital Cognitive Health Paradox: Dynamics of AI Anxiety, Attitudes, and Digital Awareness in Emerging Adulthood Ozlem Ozden Tunca, Begum Saganak, Turkey</p> <p>Dynamic Difficulty Adjustment via Dynamic Scripting: An Empirical Study of Player Flow in a Brawler Game Justin Gold, Khaldoon Dhou, United States</p> <p>Sinusoidal time-based features and human error metrics: Advancing software defect prediction in safety-critical systems Carlos Andres Ramirez Catano, Makoto Itoh, Japan</p>	
End of Day 1 Sessions		
Day 2 Technical Sessions		
9:00 - 10:00 Technical Sessions		
DAY 2	IHSI 3	Room 1
SESSION 10	Intelligence, Technology and Analytics II	
Friday Feb 13	Session Chair(s): Karan Shah, Germany and Feng Jiang, USA	
9:00 - 10:00 (CET)	<p>Stress-Aware Urban Mobility: Predicting User Comfort with Physiological and Geo-Semantic Features Karan Shah, Rene Kelpin, Alexander Steinmetz, Germany</p> <p>AI-Powered Tactile Glove for Human Recognition in Low-Visibility Fire Environments Feng Jiang, Yongshi Guo, Jianhua Yan, United States</p> <p>Bridging Ancient Art and Modern Technology: AI-Driven Storytelling of Dunhuang Mogao Grottoes Yang Liu, Xinran Mao, Jiejin Sun, Jiayi Qian, Sibei Chen, Cherine Abigail Kurniawan, Clement Fernando Kusuma, Fang Liu, China</p>	

Synthetic Network Metric Generation via Conditional DDPM with Categorical and Continuous Log-Metric Conditions
Sangwon Oh, Hoyong Ryu, Jaehyung Park, Jinsul Kim, South Korea

DAY 2		IHSI 5	Room 2
SESSION 11	Humans and Artificial Systems Complexity II		
Friday Feb 13	Session Chair(s): Borys Ioshchikhes, Germany and Nikita Islam, United States		
9:00 - 10:00 (CET)	Knowledge Engineering with Large Language Models: Accelerating Fuzzy Rule Bases Development for Energy-Aware Expert Systems Borys Ioshchikhes, Ann-kathrin Bischoff, Jerome Stock, Micheal Frank, Matthias Weigold, Germany		
	Transparency for Trust: Enhancing Acceptance and System Integration of Intelligent AI in Healthcare Nikita Islam, Ancuta Margondai, Julie Rader, Sara Willox, Cindy Von Ahlefeldt, Mustapha Mouloua, Valentina Ezcurra, United States		
	Integrated Disaster Situation Management System with Domain-Specific Ontology Model Vesa Salminen, Matti Pykkönen, Ari Saarinen, Nikolai Ylirotu, Finland		
	Integrating Agility and Risk-Aware Decision Making in Software Supply Chains: A Quantitative Modeling Perspective Samira Noshafagh, Debora Di Caprio, Francisco Javier Santos Arteaga, Italy		
	Human system integration in future AI-supported MUM-T mission management Birte Thomas- Friedrich, Johannes Maria Ernst, Max Friedrich, Germany		
DAY 2		IHSI 6	Room 3
SESSION 12	Inclusive Human Systems II		
Friday Feb 13	Session Chair(s): Debra Henneberry, United States and Dimitrios Ziakkas, United States		
9:00 - 10:00 (CET)	The Role of Ethics and Public Acceptance in Transportation Accident Investigations: The Greek Case Study Dimitrios Ziakkas, Debra Henneberry, Ioanna Lekeia, Greece		
	Ethics as a Human Factor in Flight Safety: Developing a Training Tool for the Prevention of Ethics-Related Aviation Accidents and Critical Incidents Dimitrios Ziakkas, Debra Henneberry, Ioanna Lekeia, Greece		

Moving Towards Industry 5.0: Competency-Based Training Assessment & Sector Unification

Konstantinos Pechlivanis, Dimitrios Ziakkas, Konstantinos Akylidis, Greece

Bioinspired Design in Additive Manufacturing: A Review of AI, Multi-Scale Strategies, and Fabrication Constraints

Ramon Angosto Artigues, Andrea Fernández Martínez, Ander Reizábal López-para, Iñigo Flores Ituarte, Amirmohammad Daareyni, Santiago Muños Landín, Spain

A Multimodal AI Pipeline for Fashion Design: Co-Creation and Technical Insight

Elena Pucci, Leonardo Giliberti, Margherita Tufarelli, Italy

10:00 - 10:30 • Sessions Break

Day 2 Technical Sessions

10:30 - 11:30 Technical Sessions

DAY 2

IHSI 6

Room 1

SESSION 13 Inclusive Human Systems III

**Friday
Feb 13**

Session Chair(s): Laura Giraldi and Elisabetta Benelli, Italy

10:30 -
11:30 (CET)

Designing User Interfaces for Semi-Autonomous Tram Systems: Human–Machine Interaction, Future Scenarios, and the Transition Toward Automated Mobility
Laura Giraldi, Elisabetta Benelli, Francesca Morelli, Italy

Toward Pigment-Free Leather: A Structural Color Design Framework Based on Photonic Crystal Principles
Dehe Yao, Ruan Xiaoxue Bai, China

From Concept to Construction: A Framework for Smart Building Material Innovation in South Africa
Liezl Le Roux, Tascha Bremer, South Africa

Preventing Violence in Schools: A Psychoeducation Program Examining the Effects on Teachers Perceptions and Attitudes Toward Violence and Bullying

Ozlem Ozden Tunca, Alp Giray Kaya, Ayca Cikrikci, Cetin Kilic, Havvane Sama Cicek, Turker Cevher, Esra Betul Ergul, Turkey

Smart materials from Absorbent hygiene products (AHP) waste: a model of inclusive circular economy
Benedetta Terenzi, Giovanna Binetti, Italy

Identification of Preferred Relaxation and Sleeping Postures in Highly Automated Vehicles

Miriam Schäffer, Souren Kosejian, Marat Nikita Pak, Wolfram Remlinger, Germany

DAY 2**IHSI 7 Room 2****SESSION 14****Workshop: Model-based Stakeholder-driven Exploration and Design of Human-Autonomy/AI Teaming****Friday
Feb 13****Presenters: Paul Weiser, Sarah Rudder, Anja Dannewitz, Frank Flemisch, Germany****10:30 -
11:30 (CET)****Workshop: Model-based Stakeholder-driven Exploration and Design of Human-Autonomy/AI Teaming****Paul Weiser, Sarah Rudder, Anja Dannewitz, Frank Flemisch, Germany****DAY 2****IHSI 8 Room 3****SESSION 15****Applications and Future Trends: Digital Inclusion and Interpretable Multimodal****Friday
Feb 13****Session Chair(s): Paulo Eduardo Tonin, Italy and Igor Bernik, Slovenia****10:30 -
11:30 (CET)****Sensory and Regenerative Design in SMEs: Strategies for Environmental Restoration and Experiential Engagement****Paulo Eduardo Tonin, Marinella Ferrara, Elton Nickel, Italy****Digital Inclusion as a Cornerstone of a Secure Society 5.0:
Rethinking Safety in the Future Digital Society****Igor Bernik, Slovenia****Interpretable Multimodal Framework for Assessing Cognitive Load and Stress in Collaborative Robot Environments****Sandi Baressi Šegota, Darko Ettinger, Ivan Lorencin, Nikola Tankovic, Luka Blašković, Nikola Andelić, Croatia****Emotional UX Breakdown in Vision-Driven Organizations: A Qualitative Study of Empathetic Professionals in AI and DX Transformation****Yuko Hirai, Japan****Modern Technology Adoption in Property Valuation:
Perceptions in South Africa****Barend Du Toit, Christopher Amoah, South Africa****11:30 - 12:00 • Sessions Break**

Day 2 Technical Sessions**12:00 -13:00 Technical Sessions****DAY 2****IHSI 5****Room 1****SESSION 16 Humans and Artificial Systems Complexity III****Friday Feb 13 Session Chair(s): Ancuta Margondai, United States and Yvain Tisserand, Switzerland**

12:00 -13:00 (CET) The Transparency Paradox: How AI Explanations Reduce Perceived Autonomy in Organizational Decision-Making
Ancuta Margondai, Sara Willox, Anamaria Acevedo Diaz, Soraya Hani, Nikita Islam, Mustapha Mouloua, United States

Integration of Musculoskeletal and Autonomic Ocular Cues in Virtual Humans: Effects on Emotion Perception and Authenticity
Yvain Tisserand, Elise Prigent, Eva R Pool, Aline Layachi, Michel-ange Amorim, David Rudrauf, Switzerland

The Potential of Synthetic Data Generation in Education
Mohammad Khalil, Norway

Secure Cognitive Orchestration Framework for Multi-Domain Physical Internet: Integrating AI-Driven Logistics, Energy Distribution, and Cybersecurity
Fabrizio Benelli, Franco Maciariello, Vittoro Stile, Italy

Human-AI Landscape Visualization Through 3D Gaussian Point Clouds: Investigating Interactive Environmental Reimagination Technology
Xiaoqiao Li, Cheuk-kit Chung, Ho-yin Ma, Hong Kong SAR China

Cultural Dynamics in Next-Generation Cockpit Design: Integrating Human Factors, Inclusivity, and System Resilience in Transportation Aviation
Debra Henneberry, Dimitrios Ziakkas, Eleftherios Bokas, Konstantinos Pechlivanis, United States

DAY 2**IHSI 7****Room 2****SESSION 18 Human Systems Integration: Interaction and User Experience****Friday Feb 13 Session Chair(s): Kyoko Kamimura and So Nishina, Japan**

12:00 -13:00 (CET) Designing Multidimensional Digital Purchase Journeys: CASCADE and CASMOT Conceptual Models
Kyoko Kamimura, Japan

A Framework for the Social Implementation of Visions: Integrating Design, Experimentation, and Culture
kazuhiko yamazaki, So Nishina, Japan

Municipal revenue generation and informal settlements: The case of the Chief Albert Luthuli Local Municipality

Lerato Motloung, Partson Paradza, Benita Zulch, Joseph Yacim, Steven Ngubeni, South Africa

Exploratory Research on the Migration of Auteurs' Cinematic Aesthetic Styles in AI-generated Short Films

Yazhou Chen, China

Digital transformation in social intervention: a mixed-methods approach to ethical practices and inclusion

Elizabeth Gaspar Di Paolo, Portugal

Generating Comic Instructions for Self-Explaining Ambient Systems

Marvin Berger, Börge Kordts, Andreas Schrader, Germany

DAY 2

IHSI 8 **Room 3**

SESSION 19 Applications and Future Trends: Learning and Training II

Friday Feb 13 **Session Chair(s): Isabel Metz, Germany and Mari Myllylä, Finland**

12:00 -13:00 (CET) From Tower to Center: Conversion Training for Remote Tower Operations

Isabel Carole Metz, Maria Hagl, Jörn Jakobi, Germany

Acceptance of conceptual engineering models for new technologies

Mari Myllylä, Henrikki Salo-pöntinen, Pertti Saariluoma, Finland

Blue Thinking: Human-Centered Design for Sustainability and the Blue Economy in Education

Ana Cardoso, Maria Rui Correia, José Simões, Portugal

Findings of a Usability Study of Family Portal in Eastern Maryland among School-going Children Caregivers

Miselta Tita, Joyram Chakraborty, Mona Mohamed, United States

13:00 - 13:30 • Sessions Break

Day 2 Technical Sessions

13:30 -14:30 Technical Sessions

DAY 2

IHSI 8 **Room 1**

SESSION 20 Human-Centered Interaction and Experience I

Friday Feb 13 **Session Chair(s): Marianna Oliverio, Italy and Anamaria Acevedo Diaz, United States**

13:30 -14:30 (CET) Human-centered approach for the development of the housing for an ultrasound probe

Marianna Oliverio, Enrico Trallori, Matteo Lapi, Italy

The Mirror Effect: How Intelligent Systems Create Emotional Connection Through Language Reflection

Anamaria Acevedo Diaz, Ancuta Margondai, Valentina Ezcurra, Sara Willox, Sophia Fernanda Sakakibara Olgini Capello, Mustapha Mouloua, United States

Influence of operator physical characteristics on compliance with collaborative robot

Sandi Baressi Šegota, Darko Ettinger, Nikola Tankovic, Romeo Šajina, Vedran Mrzljak, Ivan Lorencin, Croatia

Promoting Pro-Environmental Behavior through Destructive Experiences in Virtual Reality: Design and Implementation of the VR Experience

Shunya Tanaka, Wataru Ogomori, Kimi Ueda, Hirotake Ishii, Hiroshi Shimoda, Japan

Designing User-Centered Exercise Science Education: Integrating HCI Principles to Address Fitness Technology Disparities

Tiffany Mulally, United States

Integrating uncertainty-aware stress detection with spoken dialogue-based interaction for human-centered stress management

Prachi Sheth, Jordan Schneider, Teena Hassan, Germany

DAY 2

IHSI 8

Room 2

SESSION 21 Human-Centered Interaction and Experience II

Friday Feb 13 Session Chair(s): Marko Medojevic, United Kingdom and Pascal Rommel, Germany

13:30 -14:30 (CET) Human-Centred Classification of Remote Operation Intervention Scenarios for Automated Vehicles
Marko Medojevic, Adam Bogg, Stewart Birrell, Kevin Vincent, Rav Babbra, United Kingdom

Morphing Systems: Analyzing the Influence of Different Parameters on the Perception of Morphing
Pascal Rommel, Enzo Castagna, Daniel Holder, Thomas Maier, Germany

A Synergistic, Non-Invasive Sensing-Fusion Approach for Predictive Kinetosis Monitoring in Autonomous Vehicles
Philipp Román, Eva Maria Knoch, Germany

Do Not Adjust Your Set! How a Visual Alert Reduced Unnecessary Human Intervention in an Automated Vehicle
Adam Bogg, Stewart Birrell, United Kingdom

Algorithmic personalization versus informational diversity. The Instagram users perception
Gabi Araujo, Andreia Pinto De Sousa, Portugal

Neuroergonomic and Neurodiverse Revaluation of VR, AR, and Traditional Drone Control Systems for Equitable, Therapeutic, and Inclusive Operation
Suvipra Singh, Charlotte Geary, United States

End of Day 2 Sessions



Poster Demonstration Session

Thursday - Friday Feb 12-13, 2026 [10:00 - 14:00]

A-1	Assessing the Development of Professionalism in Teacher Candidates through Mixed Reality Roberta Yeager, Colleen Duffy, United States
A-2	Effects of AI Conversational Agents on Stress Reduction: A Meta-Analysis (2015- 2026) Cindy Von Ahlefeldt, Ancuta Margondai, Mustapha Mouloua, Valentina Ezcurra, Soraya Hani, Anamaria Acevedo Diaz, United States
A-3	The Silent Impact of AI: Unveiling Motivational Side Effects in the Digital Workplace Karsten Huffstadt, Germany
A-4	A Unified Multimodal Pipeline for Luxembourgish Language Learning: Curriculum-Grounded Retrieval and LAM-Driven Interaction Hedi Tebourbi, Piotr Kluczynski, Sana Nouzri, Yazan Mualla, Abdeljalil Abbas- Turki, Luxembourg
A-5	Emotional Engagement and Well-Being in Japanese Households through aibo as a Domestic Companion Yuka Miyazawa, Osamu Yoshie, Japan
A-6	Injury severity characteristics of crashes by at-fault drivers requiring a driving fitness evaluation Sangsu Kim, Younshik Chung, South Korea
A-7	Detecting Internet Scam in Social Media Platform based on Large Language Model I-ching Hsu, Wei-chun Hung, Taiwan
A-8	AI Service Use and Social Integration among North Korean Defectors in South Korea: The Mediating Role of Social Capital Yumi Jang, Jinkyung Paik, South Korea





Please join us for the:
**17th International
Conference on**

Applied Human Factors and Ergonomics

and the Affiliated Conferences

July 20-24, 2026

**Fenerbahçe University
Istanbul, Turkey**





Please join us for the:

**8th International
Conference on**

**Human Systems
Engineering and Design:
Future Trends &
Applications (IHSED 2026)**

Sept 22-24, 2026

**Hilton Paris Opera
Paris, France**