

The 18th ACM International Conference on PErvasive Technologies Related to Assistive Environments PETRA 2025

Program

June 25 – June 27, 2025, Corfu, Greece

Organized by

University of Texas at Arlington, Arlington, Texas, USA

With sponsorship from

University of Texas at Arlington, Arlington, Texas, USA

The National Science Foundation (NSF), USA

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Welcome to Petra 2025

Dear Friends and Colleagues,

On behalf of the PETRA Program Committee, we welcome you to the 18th ACM International Conference on **PErvasive Technologies Related to Assistive Environments**, PETRA 2025, taking place June 25- June 27, 2025, on the majestic island of Corfu, Greece. PETRA is an interdisciplinary conference with a focus on pervasive technologies that improve the quality of life and enhance human experience and performance in a wide range of settings, in the workplace, at home, in public spaces, urban environments, and others. Scientific results range from basic research in computer vision, machine learning, data mining, human-robot interaction, and big data, to engineering applications in robotics, sensors, devices, wearables, and software solutions that address physical, cognitive, and mental human performance and monitoring. The conference addresses the needs of both healthy individuals and people with special needs. Like previous years, the US National Science Foundation (NSF) has supported the conference with a Doctoral Consortium (DC) award that offers support to student authors of accepted papers. PETRA 2025 distinguishes papers with three types of awards: Best Paper Award, Best Workshop Paper Award, and Best Poster Award. We hope PETRA 2025 offers inspiring opportunities to showcase your research, spark collaboration, and network. We appreciate your participation and wish you a happy summer.

PETRA 2025 Organizing Committee

Invited Speakers

Day 1



Dr. Manolis Chiou is an Assistant Professor in the School of Electronic Engineering and Computer Science at Queen Mary University of London and an honorary research fellow at the University of Birmingham. Prior to this, he led the Human-Robot Teaming group at the Extreme Robotic Lab at the University of Birmingham. He received his Ph.D. from the School of Computer Science, University of Birmingham in 2017. His work aims to advance Human-Robot Teaming by combining AI, Human-Robot Interaction, and human factors, enabling humans and robots to cooperate efficiently using their complementing capabilities to achieve shared goals. He is particularly interested in variable autonomy robotic systems with a human-in-the-loop deployed in hazardous or remote environments, keeping humans out of harm's way.

Day 2



Dr. Jens Gerken holds the chair of Inclusive Human-Robot Interaction at TU Dortmund University, Germany. Over the last 10 years, Prof. Gerken has gained extensive experience in the context of physically assistive robots for people with motor impairments. In particular, he has been concerned with interaction and visualization design, transferring findings from Human-Computer Interaction, CSCW, and Information Visualization to Human-Robot Interaction research. Most recently, the work of his group has focused on shared control approaches to increase the feeling of autonomy and competence for users.

Day 3



Dr. Hong Jiang is Chair and Wendell H. Nedderman Endowed Professor of Computer Science and Engineering at the University of Texas at Arlington. Before joining UTA, he was a Program Director at National Science Foundation (2013.1-2015.8) and at University of Nebraska-Lincoln since 1991, where he was Willa Cather Professor of Computer Science and Engineering. He has graduated 20 Ph.D. students and supervised more than 20 post-doctoral fellows and visiting scholars. His present research interests include computer architecture, computer storage systems and parallel I/O, high-performance computing, big data computing, cloud and edge computing. He is a Topic and Associate Editor of the IEEE Transactions on Computers. He has over 350 publications in major journals and international Conferences in these areas. Dr. Jiang is a Fellow of IEEE, and Member of ACM.

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CONFERENCE DAY 1

08:30-09:30	Conference Registration	
09:30-09:50	<i>Room 1 (Kerkyra Ballroom)</i>	
09:30-09:50	Conference Opening & Welcome Fillia Makedon, Conference Chair, University of Texas Arlington, USA	
09:50-10:50	Invited Talk Presenter: Manolis Chiou, Queen Mary University of London <i>Towards Transdisciplinary Human-Robot Teaming</i> Session Chair: Maria Kyrarini	
	<i>Room 1 (Kerkyra Ballroom)</i>	<i>Room 2 (Nausica Ballroom)</i>
11:00-12:10	Session A: Accessibility Tools, Methods and Applications Session Chairs: Maria Kyrarini A-1 Online symposium with tactile 3D model: its general efficacy as a media for the visually impaired (12 + 3 min) Kazunori Minatani, Tetsuya Watanabe and Masakazu Iwamura A-2 Speech therapy platform with automatic assessment of verbal responses (12 + 3 min) Evanthia Faliagka, Manos Plitsis, Kosmas Palios, Nassos Katsamanis, Spyridoula Stamouli, Athanasia-Lida Dimou, Christos Panagiotou, Dimitris Karadimas, Christos Antonopoulos, Nikolaos Voros and Vassilis Katsouros A-3 Extending Assistive Technology for Students with Visual Impairment and Blindness (10 + 2 min) Janine Buchholz, Kevin Fischer, Maximilian Breibach, Dietrich Paulus A-4 Implementation of Functional Requirements and Operational Support of the Audiobook Web Library of the Lighthouse for the Blind of Greece (8 min) Apostolos Meliones and Sotirios Bikos 🖥️	Session B: Assistive Robotic Systems and Human-Robot Interaction Session Chairs: Manizheh Zand B-1 Appearance Matters: Insights from Co-Design and Evaluation of Social Assistive Robots (12 + 3 min) Sebastian Pimminger, Werner Kurschl, Johannes Schoenboeck and Gerald A. Zwettler B-2 Indoor Turn-By-Turn Navigation Assistance for Robotic Rollators (12 + 3 min) Polihronis-Panagiotis Drakopoulos, George Moustiris, Costas Tzafestas and Petros Maragos B-3 Assistive Robots for Older Adults: A Human-Robot Interaction Study (12 + 3 min) Manila Caragiuli, Agnese Brunzini, Chiara Massera, Mara Candelari and Michele Germani B-4 Integrating Ontology with Deep Reinforcement Learning: A Formal Framework for Explainability in Robotic Applications (10 + 2 min) Sukriti Bhattacharya and Yannick Naudet
12:10-13:15	Session C: Human Affect, Physiology and BioSignal Analysis Session Chair: Maria Kyrarini C-1 Detecting Industrial Boredom: An In-the-Wild Study of Monotonous Manufacturing Work Using Physiological Signals (12 + 3 min) David Kostolani, Dominik Pülke and Sebastian Schlund C-2 Cognitive Fatigue Assessment for Human-Robot Collaboration: Review & Open Challenges (12 + 3 min) Manizheh Zand, Sally Wood, Fatemeh Davoudi and Maria Kyrarini C-3 Implementation and Experimental Evaluation of an Assistive Articulated Probe Algorithm (12 + 3 min) Korey Pickering, Ovidiu Daescu and Ka Yaw Teo C-4 A Robust EEG Brain-Computer Interface Approach for Decoding Hand and Foot Motor Imagery (8 min) Mohamed A. Hanafy, Saykhun Yusufjonov, Djaykhun Yusufjonov, Payman Sharafianardakani, Madan M Rayguru and Dan O. Popa 🖥️	Session D: Activity Recognition, Human Tracking and Localization Session Chairs: Ayon Roy, Mahfuza Siddiqua D-1 PAVES: Pneumatic and Vibrotactile Enhanced Shoes for terrain simulation in virtual environments on a treadmill (12 + 3 min) Marco Gabrecht, Chenwei Huang and Denys J.C. Matthies D-2 Can Eye-Tracking Accurately Detect Human Intentions in Assembly Tasks to Enhance Human-Robot Interaction? (12 + 3 min) Paul André, Maxence Grand, Damien Pellier and Francis Jambon D-3 Augmented Reality-Assisted Assessment of Workplace Ergonomy (12 + 3 min) Enes Yigitbas and Julian Karch D-4 CretaDance: A methodology for preserving Cretan folk dances through digitization and semantic annotation (8 min) Ioanna Barmounaki, Emmanouil Zidianakis, Eirini Kontaki, Maria Chnarakis, Aldo Xhako and Constantine Stephanidis 🖥️



13:15-14:25	<p>Lunch Break (Lunch tickets can be obtained at the hotel front desk)</p> <p>Lunch is included for registered conference participants staying at the main venue during the conference; if at other hotels, please contact the hotel front desk.</p>	
14:25-15:30	<p><i>Room 1 (Kerkyra Ballroom)</i></p> <p>Session E: Multimodal Interfaces and Human-Computer Interaction Session Chair: Manizheh Zand E-1 Immersive Smart Home Planning and Automation with Mixed Reality and Digital Twin Technologies (12 + 3 min) Enes Yigitbas and Julian Karch E-2 Perceptions of Blind Adults on Non-Visual Mobile Text Entry (12 + 3 min) Dylan Gaines and Keith Vertanen E-3 Identifying the Desired Word Suggestion in Simultaneous Audio (12 + 3 min) Dylan Gaines and Keith Vertanen E-4 ElderMind: A Mobile Application for Cognitive Stimulation and User Engagement (12 + 3 min) Arsénio Reis, João Barroso and Tânia Rocha E-5 Predicting Text Selection Time and Effort on Smartphones from Selection Characteristics (8 min) Gulnar Rakhmetulla and Ahmed Sabbir Arif </p>	<p><i>Room 2 (Nausica Ballroom)</i></p> <p>Session F: Pattern Recognition in Assistive Technology Applications Session Chair: Farnaz Farahanipad F-1 Unlearning with Partial Label Learning (12 + 3 min) Jörn Bach, Alexander Grohsjean, Christian Schwanenberger and Peer Stelldinger F-2 Enhancing Photoplethysmography-Based Fine-Grained Hand Gesture Detection for Assistive Technologies Supporting Autonomy (12 + 3 min) Habba'S Ngodjou Doukaga, Yan Bélanger, Pascal Fortin, Julien Maitre and Bruno Bouchard F-3 Method to Determine Most Sensitive and Accurate Mediapipe Face-Mesh Keypoints for Speech Therapy Exercises (10 + 2 min) Rica Schulze, Sabrina Schröder, Verena Uslar, Dirk Weyhe and Sebastian Fudickar F-4 Using Confidence Scores to Improve Eyes-free Detection of Speech Recognition Errors (8 min) Sadia Nowrin and Keith Vertanen </p>
	<p>Coffee Break (Please remember to bring coffee coupons) Poster session in the Nausica Ballroom (List of posters below) Doctoral Consortium Meeting</p>	
15:30-16:30	<p>Session: Posters P-1 Voice Commands for Guidance to a 3D Position: To Collect Spontaneous Data, Allan Henry, Christian Graff, Solange Rossato, José-Ernesto Gomez-Balderas and Sylvain Huet P-2 Usability & feasibility of a computerized version of the Bath Adolescent Pain Questionnaire (BAPQ), Lisa Austin and Abbie Jordan P-3 Smart Homes, Smarter Independence: Insights from Users with Disabilities, Valeria Orso, Eleonora Buiatti and Luciano Gamberini P-4 Cloud-based Computer Vision Approach for HoloLens 2, Oday Kabha, Maiara Rosa Cencic and Hanxiong Li</p>	
16:30-17:30	<p>Workshop W1: AIR: Assistive and Intelligent Robotics in Household and Workplace Environments Session Chair: Maria Kyrarini W1-1 An Adaptive Robotic Framework for Assisting People with Paralysis in Daily Living Activities (12 + 3 min) Enamul Karim, Maisha Maimuna, Ayon Roy, Minhaz Bin Farukee, Gaurav Nale, Fillia Makedon W1-2 Can Virtual AI Agents Improve Cognitive Assessment? A Virtual Reality Perspective (12 + 3 min) Aref Hebri, Hamza Reza Pavel, Sama Nikanfar, Farnaz Farahanipad, Fillia Makedon W1-3 A Survey on Assistive Technologies for Visually Impaired Individuals: Recent Innovations, Limitations, and Future Directions (12 + 3 min) Sama Nikanfar, Aref Hebri, Harish Ram Nambiappan, Gaurav Nale, Mahfuza Siddiqua, Farnaz Farahanipad and Fillia Makedon</p>	<p>Session G: Smart Systems for Learning and Wellness Session Chair: Lorenzo James G-1 Designing an Interoperable and Modular System Architecture to support the Development of Human Digital Twins for Promoting Healthy Lifestyle Behaviors (12 + 3 min) Wilhelmus van Vroonhoven, Lorenzo James and Pieter van Gorp G-2 Towards Empowering Teachers with AI for Dynamic Evaluation and Assessment for Students with Special Needs (10 + 2 min) Marina Buzzi, Barbara Leporini, Angelica Lo Duca, Veronica Punzo and Daniela Rotelli G-3 Analysis of Visual Behavior and Cognitive Load of Pilots during Engine Failures with an Emergency Landing Assistance System in Mixed Reality (12 + 3 min) Peter Fritz, Christian Thomay, Benedikt Gollan, Wolfram Schiffmann and Marius Rosenbaum</p>

End of Day 1 of the PETRA conference

CONFERENCE DAY 2

09:00-09:50	<i>Kerkyra Ballroom</i>	
	Invited Talk Presenter: Jens Gerken , <i>Associate Dean for Research, TU Dortmund University, Germany</i> <i>Balancing Acts: Rethinking Assistive Robot Autonomy for Human Well-being</i> Session Chair: Maria Kyrarini	
09:55-11:00	<i>Room 1 (Kerkyra Ballroom)</i>	<i>Room 2 (Nausica Ballroom)</i>
	Workshop W2: DTW: Digital Transformation Workshop Session Chair: Yasushi Kambayashi W2-1 Effectiveness of Sub-MSH Size Pruning in BCP Based ILP , (12 + 3 min) Tomo Nakazawa, Tsutomu Kumazawa, Yasushi Kambayashi and Munehiro Takimoto W2-2 Rent Price Prediction Using Machine Learning with Public Land Price, Geospatial, and Demographic Projection Data (12 + 3 min) Goei Sato and Hiroyuki Nishiyama W2-3 Development of a UAV-based Disaster Evacuation Support System , (12 + 3 min) Shohei Taga, Yuta Sekiguchi, Toshiyasu Kato, Munehiro Takimoto and Yasushi Kambayashi W2-4 Evaluating Large Language Models' Ability to Pastiche Literary Texts (12 + 3 min) Anca Dinu, Andra-Maria Florescu and Liviu P. Dinu	Session H: Wearable Systems and Monitoring Devices Session Chair: Farnaz Farahanipad H-1 Automated Competency Assessment in Pilot Training based on Behavior Modeling of Flight Performance and Visual Attention (12 + 3 min) Andreas Fermitsch, Peter Fritz, Christian Thomay, Benedikt Gollan, Christian Norden and Carsten Mangasser H-2 ThermoQueue: A Wearable Actuator for Simultaneous Squeeze and Thermal Feedback (12 + 3 min) Yunxiao Wang, Robert Rosenkranz, M. Ercan Altinsoy and Likun Fang H-3 A Transformer-Based Framework for Greek Sign Language Production using Extended Skeletal Motion Representations (12 + 3 min) Chrysa Pratikaki, Panagiotis Filntisis, Athanasios Katsamanis, Anastasios Roussos and Petros Maragos H-4 Evaluating Tap, Flick, Force, and Wrist Gestures for Interacting with Vertical Displays via Smartwatch (8 min) Yuan Ren, Ahmed Sabbir Arif 
11:00-12:15	Continued Workshop W2: DTW: Digital Transformation Workshop Session Chair: Yasushi Kambayashi W2-5 Classification of mild cognitive impairment using machine learning with dynamic functional connectivity from resting-state functional MRI (12 + 3 min) Ryosuke Minami, Ryo Hatano and Hiroyuki Nishiyama W2-6 Gravitational Search Algorithm-Based Efficient Model Checking (12 + 3 min) Asaka Takase, Tsutomu Kumazawa and Munehiro Takimoto W2-7 Multi-Agent Simulation of Modern Human Dispersal as a Biological Model (10 + 2 min) Saori Iwanaga, Makoto Inoue and Miyuri Kimura 	
	Workshop W3: SOCIO-NLP: Social Development through NLP-driven Interdisciplinary Collaborations Session Chair: Mustafa Ocal W3-1 Leveraging Language Modeling and Dynamic Social Network Analysis to recognize Patterns in the Spread of COVID-19 Misinformation Narratives on Social Media (12 + 3 min) Caleb Stam, Emily Saldanha, Mahantesh Halappanavar and Anurag Acharya W3-2 Unmasking Propaganda: A Comparative Analysis of Masked and Causal Language Models (12 + 3 min) Claudiu Creanga, Liviu Dinu and Ioachim Lihor W3-3 Automatically Identifying Victim Blaming on Social Media in cases of Sexual Assault, Sexual Harassment and Abuse (12 + 3 min) Anca Dinu and Ana Maria Niculescu W3-4 Evaluation and Analysis of Low-socioeconomic Student Narratives: Linguistic, Sentiment, and Topic Modeling Insights (12 + 3 min) Nahed Abdelgaber, Labiba Jahan, Jia Zhang W3-5 The Language of Influence: Sentiment, Emotion, and Hate Speech in State Sponsored Influence Operations (10 + 2 min) Ashfaq Ali Shafin and Khandaker Mamun Ahmed 	
12:15-13:20	Lunch Break (<i>Lunch tickets can be obtained at the hotel front desk</i>) <i>(Lunch is included for participants staying at the main venue during the conference; if at other hotels, please contact the hotel front desk).</i>	

13:20-14:30	<p>Session I Pervasive Systems for Smart Health Devices Session Chair: Denys Matthies</p> <p>I-1 Optimization and Validation of a 2D-LiDAR-Coverage Algorithm (12 + 3 min) Noel D'Avis and Silvia Faquiri</p> <p>I-2 Technical Analysis for Electro-Sensory 3D Foot Scanning in a Shoe (12 + 3 min) Denys J.C. Matthies, Maximilian Kasbohm, Gerald Bieber and Troy Nachtigall</p> <p>I-3 Assistive Technology for Neurological, Geriatric, and Pediatric Bladder Care: A Low-Power Wearable Ultrasound Solution (8 min) Rouzbeh Molaei Imenabadi, Katherine G. Brown and Dinesh Bhatia 🖥️</p> <p>I-4 Towards Accounting for Nonhuman Agency in Technology Design for Aging (8 min) Alisha Pradhan, Shaan Chopra, Pooja Upadhyay, Robin Brewer and Amanda Lazar 🖥️</p>	<p>Session J: Reasoning Systems and Machine Learning for Assistive Environments Session Chair: Daniele Riboni</p> <p>J-1 Integration of Retrieval-Augmented Generation technique for LLM-based differential diagnosis assistant (12 + 3 min) Simone Pinna, Silvia Maria Massa, Matteo Fenu, Giulio Casti and Daniele Riboni</p> <p>J-2 Design and Development of an Interactive AI Toolkit for Engaging Older Adults in AI Discussions (12 + 3 min) Paula Kelly, Emma Clarke, Mayank Parmar, David Powell, Martin Lynch, Shane Ormonde, Keith Colton, Finbarr O'Meara, Dymrna O'Sullivan and Damon Berry</p> <p>J-3 Finetuning LLMs for Grammatical Error Correction in English and Greek Texts (8 min) Dimitrios Koutsomitropoulos 🖥️</p> <p>J-4 Exploring Developer Trust, Adoption, and Usage of AI-Powered Coding Assistants for Web Accessibility (7 + 2 min) Pooja Patel and Edward Melcer 🖥️</p>
14:30-15:00	<p align="center">Coffee Break (Please remember to bring coffee coupons)</p>	
15:00-16:15	<p>Workshop W4: PerInt: 7th Workshop on Pervasive Intelligence in Engineering Session Chair: Charalampos Zafeiropoulos</p> <p>W4-1 AI-BEMS: Integrating Smart Readiness Indicator into AI-Driven Building Energy Management Systems as a Decision Support Framework for Optimal Service Selection (12 + 3 min) Sotirios Athanasoulis, Spiros Chadoulos, Athina Katsari, Stelios Kalogridis, Nikolaos Ipiotis and Matthaios Bimpas</p> <p>W4-2 Pre-Clinical Results of the Impact of Blue-Green Urban Solutions on Humans' Health (12 + 3 min) Aikaterini Angeli, Anastasios Doulamis, Nikolaos Doulamis, Anastasios Temenos, Charalampos Zafeiropoulos, Nikolaos Bakalos and Andreas Lazaris</p> <p>W4-3 A Secured Photonic Device for Early Prediction and Prognosis of Diabetic Foot Ulcers using Thermal and Hyperspectral Sensing- Results from a Clinical Study (12 + 3 min) Aikaterini Angeli, Nikolaos Doulamis, Charalampos Zafeiropoulos, Ioannis Rallis and Andreas Lazaris</p> <p>W4-4 A Multimodal Causal-Inspired Approach towards Affect Modeling (12 + 3 min) Kevin Farrugia, Athanasios Papathanasiou, Konstantinos Makantasis</p>	<p>Workshop W5: INCTECH: Inclusive technology - making work more accessible and sustainable with innovative technologies: from development towards implementation Session Chair: Kim Kranenburg</p> <p>W5-1 Knowledge retention through cognitive support technology (CST) in the manufacturing industry: a process inventory (12 + 3 min) Thomas Stege, Selin Çolakhasanoglu, Koen Nijland, Etto Salomons, Danny Plass-Oude Bos and Sjoerd De Vries</p> <p>W5-2 A Preliminary Evaluation of Generative AI Tools for Blind Users: Usability and Screen Reader Interaction (12 + 3 min) Barbara Leporini, Marina Buzzi, Giuseppe Della Penna</p> <p>W5-3 Cognitive Support Technology: Enhancing Self-Efficacy in Workers with Impairments (12 + 3 min) Ellen Wilschut, Reinier Könemann, Michiel de Looze, Astrid Hazelzet, Kim Kranenburg</p> <p>W5-4 Enhancing the Adoption of Inclusive Technologies in the Workplace (10 + 2 min) Ellen Wilschut, Reinier Könemann, Michiel de Looze, Astrid Hazelzet and Kim Kranenburg 🖥️</p>
16:15-17:35	<p>Session K: Human-Centered Interaction and Technologies Session Chair: Eleonora Buiatti</p> <p>K-1 Optimizing Exergames Integration in the 5P Framework to Promote Physical Activity among People with Schizophrenia (12 + 3 min) Fructueux Jefferson Yedomon, Yannick Francillette and Bob-Antoine Jerry Ménélas</p> <p>K-2 Smarter Than Smart: Human-Centered Perspectives on Home Technologies (12+3 min) Eleonora Buiatti, Valeria Orso, Luciano Gamberini</p> <p>K-3 A Novel Concept using Mirror Displays for Ambient User Notifications (12 + 3 min) Timo Götzelmann, Pascal Karg and Mareike Müller</p> <p>K-4 Enhancing eBook Accessibility: Exploring 2D Tactile Displays for Blind and Low-Vision Readers (8 min) Sara Alzalabny, Hans Mees, Karin Müller, Thorsten Schwarz, Bastian Rapp and Rainer Stiefelhagen 🖥️</p>	<p>Session L: Data-Driven Insights and Intelligent System Design Session Chair: Ayon Roy</p> <p>L-1 COVID-19 and Flu Data Visualizer: An Interactive Tool for Visualizing Pandemic and Influenza Data Across U.S. Counties (8 min) Mohammad Shaito, Leonidas Fegaras and David Levine 🖥️</p> <p>L-2 Self-Supervised Deep Visual Stereo Odometry with 3D-Geometric Constraints (8 min) Juri Zach and Peer Stelldinger 🖥️</p> <p>L-3 Enhancing Text Entry for Users with Motor Impairments: Design and Evaluation of KeyGlide (8 min) Farid Karimli and Margrit Betke 🖥️</p> <p>L-4 Informing Human Decision-Making in Public Administration through NLP Algorithm Audits, (8 min) Daniel Fonner and Frank Coyle 🖥️</p> <p>L-5 Generalized Follow-Up WHODAS 2.0 Assessment Through Language Models and Adaptive Clustering Ensemble in Higher Education (8 min) Rakshil Kevadiya, Abbas Akkasi, Kathleen C Fraser, Boris Vukovic, Jessie Gunnell, Sonia Tanguay and Majid Komeili 🖥️</p>

		L-6 An Interdisciplinary Approach to Sign Language Data Set Collection of Native Signers (8 min) Miguel Rodríguez-Mondoñedo, Francisco Cerna-Herrera, César Ramos, Alexandra Arnaiz, Ana Rosa Moreno, Joe Huamani-Malca and Gissella Bejarano 🎤
19:30-22:00	La Veranda Cocktail Reception (In-person registered members, please remember to bring cocktail reception coupons. €50 per accompanying person)	

End of Day 2 of the PETRA conference

CONFERENCE DAY 3

	<i>Room 1</i>	
09:30-10:30	Invited Talk Presenter: Hong Jiang , <i>Wendell H. Nedderman Endowed Professor and Chair</i> <i>Department of Computer Science and Engineering, University of Texas at Arlington, USA</i> <i>An SLO-Aware Approach to Efficiency for Multi-tenant Data-Intensive Server Applications</i> Session Chair: Fillia Makedon	
10:30-11:30	Coffee Break and Awards Session Chair: Farnaz Farahanipad, Conference Program Coordinator <i>Location: Kerkyra Ballroom</i>	
	<i>Room 1 (Kerkyra Ballroom)</i>	<i>Room 2 (Nausica Ballroom)</i>
11:30-12:30	Workshop W6: CoBAC: Challenges of cross-disciplinary Concept Borrowing in Affective Computing Session Chair: Larissa Putzar W6-1 Cross-Disciplinary Concept Borrowing: A Critical Revision of a Robustness Analysis for Automatic Emotion Recognition in Conversations (12 + 3 min) Quynh Tran, Larissa Putzar, Qi Wang and Sven Blankenburg W6-2 Acceptance, Usability, and Emotions - An Extension of the UTAUT Designed for AI Virtual Assistants in the Context of Housing Modernization (12 + 3 min) Kilian Hildebrandt, Thorben Ortmann and Larissa Putzar W6-3 Emotional Manipulation in Phishing Emails: Experimental Study of Affective Responses and Human Classification Errors in a Simulated Email Environment (12 + 3 min) Mika Wiemken, Kilian Hildebrandt, André Jeworutzki and Larissa Putzar W6-4 Emotion Recognition using multi-modal data and self-supervised learning techniques (10 + 2 min) Max Neuwirt 🎤 W6-5 Working with the Gaps in Understanding: Revisiting an Approach to Affective Computing Research in the Emotion Bike Project (10 + 2 min) Susanne Draheim, Kai von Luck, Larissa Putzar 🎤	Session M: Telepresence, Virtual and Augmented Reality Session Chairs: Enes Yigitbas M-1 Taxonomy and Analysis of Security Vulnerabilities, Privacy Violations and Potential Mitigation Strategies to XR Systems (12 + 3 min) Leonard Schmidt and Enes Yigitbas M-2 TeleDriver: A Driving Simulator-Inspired Technique for Steering Telepresence Robots (8 min) Ghazal Zand and Ahmed Sabbir Arif 🎤 M-3 Evaluating User Preferences in Sharing Sensitive Information via Telepresence Robots (8 min) Ghazal Zand, David Yang and Ahmed Sabbir Arif 🎤 M-4 Leveraging Virtual Reality to Support Inclusive Design for the Visually Impaired (8 min) George Melissourgous, Damianos Gavalas and Vlasios Kasapakis 🎤 M-5 Design and Development of a VR Wheelchair Game Applying a Novel Locomotion System (8 min) Victor Sassi, Michelle Tizuka, Esteban Clua, Daniela Trevisan, Thiago Porcino 🎤
	Please provide us with your feedback in our online survey: www.petrae.org/survey	



End of the PETRA 2025 Conference

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