

14th December 2022

Oral Session 1: Investigating non verbal interaction with Social robots

Auditorium – Session Chairs: Katsu Yamane, Silvia Rossi

- 09:15–09:27 **Let's run an online proxemics study! But, how do results compare to in-person?**
Siya Kunde, Nathan Simms, Gerson Uriarte, Brittany Duncan
- 09:27–09:39 **Affective Human-Robot Interaction with Multimodal Explanations**
Hongbo Zhu, Chuang Yu, Angelo Cangelosi
- 09:39–09:51 **When to Help? A Multimodal Architecture for Recognizing When a User Needs Help from a Social Robot**
Jason R. Wilson, Phyo Thuta Aung, Isabelle Boucher
- 09:51–10:03 **If You Are Careful, So Am I! How Robot Communicative Motions Can Influence Human Approach in a Joint Task**
Linda Lastrico, Nuno Ferreira Duarte, Alessandro Carfí, Francesco Rea, Fulvio Mastrogiovanni, Alessandra Sciutti, José Santos-Victor
- 10:03–10:15 **Hey, robot! An investigation of getting robot's attention through touch**
Hagen Lehmann, Adam Rojik, Kassandra Friebe, Matej Hoffmann

Oral Session 2: Social Robot Perception and Control capabilities

Auditorium – Session Chairs: Sam Shuzhi Ge, Mariacarla Staffa

- 11:00–11:12 **Design of a Social Media Voice Assistant for Older Adults**
Jamy Li, Noah Zijie Qu, Karen Penaranda Valdivia
- 11:12–11:24 **Path-constrained Admittance Control of Human-Robot Interaction for Upper Limb Rehabilitation**
Dario Onfiani, Marco Caramaschi, Luigi Biagiotti, Fabio Pini
- 11:24–11:36 **Classification of personal data used by personalised robot companions based on concern of exposure**
Lewis Riches, Kheng Lee Koay, Patrick Holthaus
- 11:36–11:48 **Multi-modal Data Fusion for People Perception in the Social Robot Haru**
Ricardo Ragel, Rafael Rey, Álvaro Páez, Javier Ponce, Keisuke Nakamura, Fernando Caballero, Luis Merino, Randy Gómez
- 11:48–12:00 **Learning User Habits to Enhance Robotic Daily-Living Assistance**

Matteo Pantaleoni, Amedeo Cesta, Alessandro Umbrico,
Andrea Orlandini

Oral Session 3.1: Special Session 1: Social Robotics Driven by Intelligent Perception and Endogenous Emotion-Motivation Core

Room 4 - Session Chairs: *Wanyue Jiang, Xiaorui Liu*

- 12:00-12:12 **An Efficient Medicine Identification and Delivery System based on Mobile Manipulation Robot**
Meiyuan Zou, Qingchuan Xu, Jianfeng Bian, Dingfeng Chen, Wenzheng Chi, Lining Sun
- 12:12-12:24 **Research on 3D Face Reconstruction Based on Weakly Supervised Learning**
Zewei Su, Lanfang Dong, Xuejie Ji, Guoming Li, Xierong Zhu
- 12:24-12:36 **A Generative Adversarial Network Based Motion Planning Framework for Mobile Robots in Dynamic Human-Robot Integration Environments**
Yuqi Kong, Yao Wang, Yang Hong, Rongguang Ye, Wenzheng Chi, Lining Sun
- 12:36-12:48 **Robot differential behavioural expression in different scenarios**
Zhonghao Zhang, Wanyue Jiang, Rui Zhang, Yuhan Zheng, Shuzhi Sam Ge
- 12:48-13:00 **Building an Affective Model for Social Robots with Customizable Personality**
Ziyan Zhang, Wenjing Yang, Wei Wang

Oral Session 3.2: Special Session 2: Adaptive behavioral models of robotic systems based on brain-inspired AI cognitive architectures

Auditorium - Session Chairs: *Laura Fiorini, Anna Esposito, Praminda Caleb-Solly*

- 12:00-12:12 **Can I feel you? Recognizing human's emotions during human robot interaction**
Laura Fiorini, Federica G. C. Loizzo, Grazia D'Onofrio, Alessandra Sorrentino, Filomena Ciccone, Sergio Russo, Francesco Giuliani, Daniele Sancarlo, Filippo Cavallo
- 12:12-12:24 **A reinforcement learning framework to foster affective empathy in social robots**
Alessandra Sorrentino, Gustavo Assunção, Filippo Cavallo, Laura Fiorini, Paulo Menezes

- 12:24-12:36 **Robotics Technology for Pain Treatment and Management: A Review**
Angela Higgins, Alison Llewellyn, Emma Dures, Praminda Caleb-Solly
- 12:36-12:48 **Feasibility and Acceptability of Assistive Robots for At-Home Early Detection of Mild Cognitive Impairment**
Matteo Luperto, Marta Romeo, Francesca Lunardini, Javier Monroy, Carlo Abbate, Angelo Cangelosi, Simona Ferrante, Javier Gonzalez-Jimenez, Nicola Basilico, N. Alberto Borghese
- 12:48-13:00 **Implications of Robot Backchannelling in Cognitive Therapy**
Antonio Andriella, Carme Torras, Guillem Alenyà

Oral Session 4: Social Robot navigation and interaction capabilities (voice, tactile)

Auditorium – Session Chairs: Andrea Orlandini, Lewis Riches

- 14:00-14:12 **Migratable AI: Personalizing Dialog Conversations with Migration Context**
Ravi Tejwani, Boris Katz, Cynthia Breazeal
- 14:12-14:24 **Socially-Aware Mobile Robot Trajectories for Face-to-Face Interactions**
Yalun Wen, Xingwei Wu, Katsu Yamane, Soshi Iba
- 14:24-14:36 **Causal Discovery of Dynamic Models for Predicting Human Spatial Interactions**
Luca Castri, Sariah Mghames, Marc Hanheide, Nicola Bellotto
- 14:36-14:48 **Affect Display Recognition through Tactile and Visual Stimuli in a Social Robot**
Sara Marques-Villarroya, Juan Jose Gamboa-Montero, Cristina Jumela-Yedra, Jose Carlos Castillo, Fernando Alonso Martín, Miguel Angel Salichs
- 14:48-15:00 **Speech-driven Robot Face Action Generation with Deep Generative Model for Social Robots**
Chuang Yu, Heng Zhang, Zhegong Shangguan, Xiaoxuan Hei, Angelo Cangelosi, Adriana Tapus

Oral Session 5: Social robots as advanced educational tool

Auditorium – Session Chairs: Salvatore Anzalone, Brittany Duncan

- 16:45-16:57 **User Evaluation of Social Robots as a Tool in One-to-one Instructional Settings for Students with Learning Disabilities**
Negin Azizi, Shruti Chandra, Mike Gray, Jennifer Fane, Melissa Sager, Kerstin Dautenhahn

- 16:57-17:09 **Kinesthetic Teaching of a Robot over Multiple Sessions: Impacts on Speed and Success**
Pourya Aliasghari, Moojan Ghafurian, Chrystopher L. Nehaniv, Kerstin Dautenhahn
- 17:09-17:21 **Expanding the use of robotics in ASD programs in a real educational setting**
Selene Caro-Via, Marc Espuña, Raquel Ros
- 17:21-17:33 **Training School Teachers to Use Robots as an Educational Tool: the Impact on Robotics Perception**
Giulia Pusceddu, Francesca Cocchella, Michela Bogliolo, Giulia Belgiovine, Linda Lastrico, Maura Casadio, Francesco Rea, Alessandra Sciutti
- 17:33-17:45 **Moveable Älþbi: Applying the Montessori Method to Robot-Assisted Alphabet Learning**
Zhansaule Telisheva, Aida Zhanatkyzy, Nurziya Oralbayeva, Aida Amirova, Arna Aimysheva, Anara Sandygulova

15th December 2022

Oral Session 6.1: Foster attention and engagement strategies in social robots

Auditorium – Session Chairs: Patrick Holthaus, Alessandra Sorrentino

- 08:30-08:42 **Introducing Psychology Strategies to increase Engagement on Social Robots**
Fernando Alonso-Martin, Sara Carrasco-Martínez, Juan José Gamboa-Montero, Enrique Fernández-Rodicio, Miguel Ángel Salichs
- 08:42-08:54 **Attributing intentionality to artificial agents: exposure versus interactive scenarios**
Lorenzo Parenti, Serena Marchesi, Marwen Belkaid, Agnieszka Wykowska
- 08:54-09:06 **A case for the design of attention and gesture systems for social robots**
Romain Maure, Erik A. Wengle, Utku Norman, Daniel Carnieto Tozadore, Barbara Bruno
- 09:06-09:18 **Gaze Cueing and the Role of Presence in Human-Robot Interaction**
Kassandra Friebe, Sabína Samporová, Kristína Malinovská, Matej Hoffmann
- 09:18-09:30 **Does Embodiment and Interaction Affect the Adoption of the Intentional Stance Towards a Humanoid Robot?**

Ziggy O'Reilly, Uma Prashant Navare, Serena Marchesi,
Agnieszka Wykowska

Oral Session 6.2: Ethics, Gender & Trust in social robotics

Room 4 - Session Chairs: Giulia Perugia, Oliver Bendel

- 08:30-08:42 **I designed it, so I trust it: the influence of customization on psychological ownership and trust toward robots**
Dimitri Lacroix, Ricarda Wullenkord, Friederike Eyssel
- 08:42-08:54 **Human-in-the-Loop Ethical AI for Care Robots and Confucian Virtue Ethics**
JeeLoo Liu
- 08:54-09:06 **Effects of Beep-Sound Timings on Trust Dynamics in Human-Robot Interaction**
Akihiro Maehigashi, Takahiro Tsumura, Seiji Yamada
- 09:06-09:18 **Effects of Realistic Appearance and Consumer Gender on Pet Robot Adoption**
Jun San Kim, Dahyun Kang, JongSuk Choi, Sonya S. Kwak
- 09:18-09:30 **Ambivalent Stereotypes Towards Gendered Robots: The (Im)mutability of Bias Towards Female and Neutral Robots**
Stefano Guidi, Latisha Boor, Laura van der Bij, Robin Foppen, Okke Rikmenspoel, Giulia Perugia

Oral Session 7: Social robot applications in clinical and assistive scenarios

Auditorium - Session Chairs: Alberto Borghese, Kerstin Sophie Haring

- 09:30-09:42 **Towards a framework for the whole-body teleoperation of a humanoid robot in healthcare settings**
Francesco Porta, Carmine Tommaso Recchiuto, Maura Casadio, Antonio Sgorbissa
- 09:42-09:54 **Social Robots to Support Assisted Living for Persons with Alzheimer's and Related Dementias**
Tyler Morris, Hiroko Dodge, Sylvia Cerel-Suhl, Xiaopeng Zhao
- 09:54-10:06 **Evaluating Human-in-the-loop Assistive Feeding Robots under Different Levels of Autonomy with VR Simulation and Physiological Sensors**
Tong Xu, Tianlin Zhao, Jesus G Cruz-Garza, Tapomayukh Bhattacharjee, Saleh Kalantari
- 10:06-10:18 **Deep Learning-Based Multi-Modal COVID-19 Screening by Socially Assistive Robots using Cough and Breathing Symptoms**
Meysam Effati, Goldie Nejat

10:18–10:30 **Play Dynamics in a Collaborative Game With a Robot as a Play-Mediator**
Negin Azizi, Kevin Fan, Melanie Jouaiti, Kerstin Dautenhahn

Oral Session 8: Advanced HRI capabilities for interacting with children

Auditorium – Session Chairs: John-John Cabibihan, Shruti Chandra

14:00–14:12 **The Sound of Actuators in Children with ASD, Beneficial or Disruptive?**

Melanie Jouaiti, Eloise Zehnder, François Charpillet

14:12–14:24 **A Model Child? Behavior Models for Simulated Infant-Robot Interaction**

Ameer Helmi, Kristen M. Koenig, and Naomi T. Fitter

14:24–14:36 **Living with Haru4Kids: Child and Parent Perceptions of a Co-Habitation Robot for Children**

Leigh Levinson, Gonzalo A. Garcia, Guillermo Perez, Gloria Alvarez-Benito, J. Gabriel Amores, Mario Castaño-Ocaña, Manuel Castro-Malet, Randy Gomez, Selma Šabanović

14:36–14:48 **Kaspar Causally Explains**

H. Araujo, P. Holthaus, M. Sarda Gou, G. Lakatos, G. Galizia, L. Wood, B. Robins, M.R. Mousavi, F. Amirabdollahian

14:48–15:00 **Computational Audio Modelling for Robot-Assisted Assessment of Children’s Mental Wellbeing**

Nida Itrat Abbasi, Micol Spitale, Joanna Anderson, Tamsin Ford, Peter B. Jones, Hatice Gunes

Oral Session 9: Design and evaluate user's robot perception and acceptance

Auditorium – Session Chairs: Gabriele Trovato, Alessandro Di Nuovo

16:45–16:57 **Robotics for well-being at work: How could robots satisfy social needs in a professional context? A positioning from social psychology for inspiring the design of the future robots**

Mégane Sartore, Ioana Ocnarescu, Louis-Romain Joly, Stéphanie Buisine

16:57–17:09 **The effect of anthropomorphism on diffusion or responsibility in HRI**

Erika Tuvo, Paola Ricciardelli, Francesca Ciardo

17:09–17:21 **Design and preliminary validation of social assistive humanoid robot with gesture expression features for mental health treatment of isolated patients in hospitals**

Diego Arce, Sareli Gibaja, Fiorella Urbina, Camila Maura, Dario Huanca, Renato Paredes, Francisco Cuellar, Gustavo Perez-Zuniga

17:21-17:33

“Armed” and Dangerous: How Visual Form Influences Perceptions of Robot Arms

Rhian C. Preston, Nisha Raghunath, Christopher A. Sanchez, Naomi T. Fitter

17:33-17:45

GeneRobot: How participatory development of social robots for assisted living brings generations together

Caterina Neef, Katharina Linden, Sophie Killmann, Julia Arndt, Nathalie Weßels, Anja Richert

