



The 15th International Conference on Social Robotics

Conference Program

Under the Patronage of the Prime Minister and Minister of Foreign Affairs,
H.E. Sheikh Mohammed bin Abdulrahman bin Jassim Al Thani



December 3-7, 2023



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Welcome to ICSR 2023 in Doha!

Dear Colleagues and Friends,

Welcome to the 15th International Conference on Social Robotics (ICSR) 2023! This is the first time that the conference will be held in Qatar and in the Middle East and North Africa region.

ICSR is a unique conference aimed at bringing together researchers and practitioners from home and abroad to share ideas and enhance discussions on the interaction between humans and intelligent robots and on the integration of social robots into our society.

The theme of this year's conference is "*Human-Robot Collaboration: Sea, Air, Land, Space, and Cyberspace*". The theme emphasizes on all physical and cyber-physical domains where humans and robots collaborate.

We extend our deepest gratitude to all presenters, keynote speakers, sponsors, partners, exhibitors, and attendees for their invaluable contributions to making this conference a reality. Your dedication to the pursuit of knowledge and commitment to excellence are the driving forces behind the success of ICSR 2023.

Thank you for being part of this exciting journey. Let's begin the rich discussions, sharing of groundbreaking research, and forging connections that go beyond the conference!

Abdulaziz Al Ali and John-John Cabibihan
General Chairs

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Conference Information

Important Information ICSR 2023 Doha Qatar

Time: December 3-7, 2023

Registration: On site or online (<https://evnk.co/ICSR23>)

Venue: Qatar University, Building i11 (Student Affairs Building)

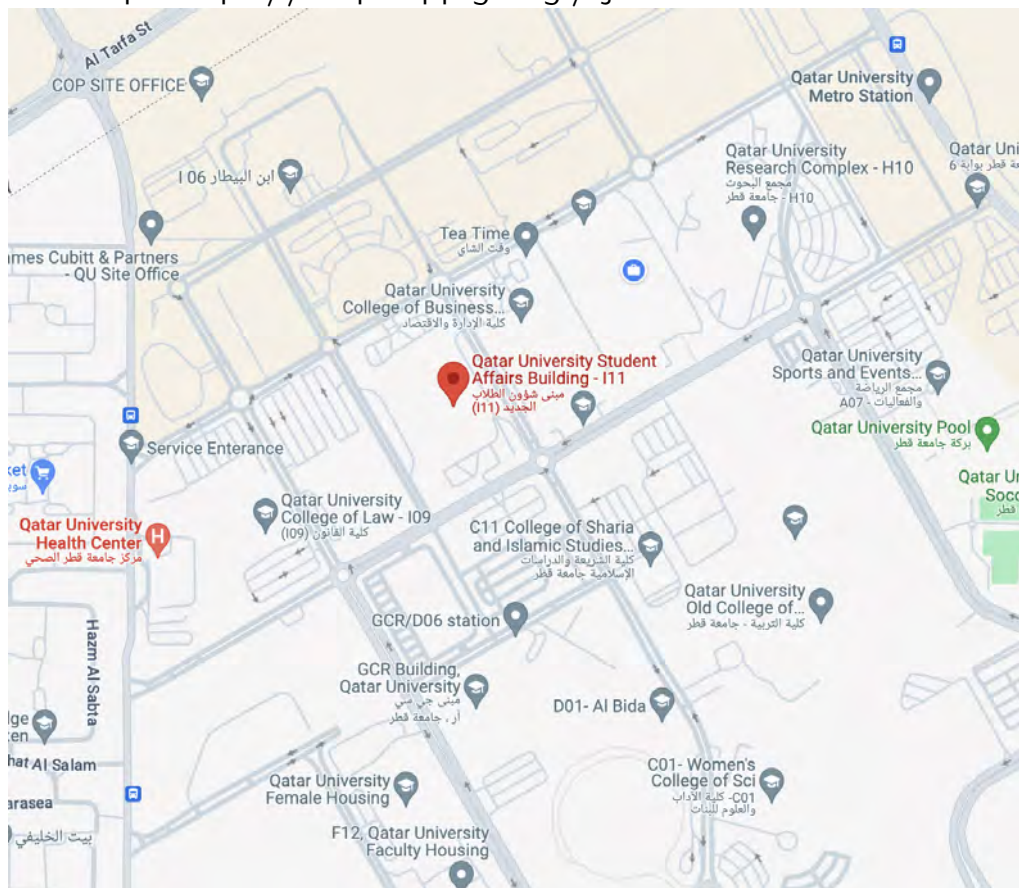
Website: <https://icsr23.qa>

Contacting the Organizing Committee: ICSR23@qu.edu.qa

MAP inside QU Campus

Venue: Qatar University Student Affairs Building I11

Map: <https://maps.app.goo.gl/rjtaHaWxiHCboWDA6>



Organizing Committee

General Chairs	Abdulaziz Al Ali, KINDI Center for Computing Research, Qatar University John-John Cabibihan, Mechanical and Ind'l Engineering, Qatar University
Program Chairs	Nader Meskin, Electrical Engineering, Qatar University Silvia Rossi, University of Naples Federico II, Italy
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Publication Chairs	Hongsheng He, University of Alabama, USA Wanyue Jiang, Qingdao University, China
Publicity Chairs	Mariam Al Belushi, KINDI Center for Computing Research, QU Ghusoon Al Yafei, KINDI Center for Computing Research, QU Alessandra Rossi, University of Naples Federico II, Italy Patrick Holthaus, University of Hertfordshire, UK Shruti Chandra, University of Waterloo, Canada Justin Hart, University of Texas at Austin, USA Alireza Taheri, Sharif University of Technology, Iran Mohammad Shidujaman, Independent University, Bangladesh
Exhibition Chairs	Mariacarla Staffa, University of Naples Parthenope, Italy Ryad Chellali, Moore Nanjing Robotics Institute, LLC, China Minsu Jang, Elec. and Telecom. Research Inst, Korea Pin-Chu Yang, HatsuMuv Corp and Waseda University, Japan
Web Chair	Rateb Jabbar, KINDI Center for Computing Research, Qatar University

Standing Committee

Shuzhi Sam Ge (Chair)	National University of Singapore, Singapore
Oussama Khatib	Stanford University, USA
Maja Mataric	University of Southern California, USA
Haizhou Li	Chinese University of Hong Kong, China
Jong Hwan Kim	Korea Advanced Institute of Science and Technology, Korea
Paolo Dario	Scuola Superiore Sant'Anna, Italy
Ronald C. Arkin	Georgia Institute of Technology, USA

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Filippo Cavallo	University of Florence, Italy
Mary-Anne Williams	University of New South Wales, Australia
Miguel Angel Salichs	Universidad Carlos III Madrid, Spain

Program

Date	Time	Program
Dec 3, Sun	8:30 - 12:00	Grand Opening
	12:00 - 14:00	Lunch and Networking
	14:00 - 17:00	Robot Design Competitions
Dec 4, Mon	8:30 - 12:30	Workshops
	12:30 - 14:00	Lunch and Networking
	14:00 - 17:00	Workshops
Dec 5, Tue	8:30 - 9:00	Welcome Introduction
	9:00 - 10:00	Keynote: Abderrahmane Kheddar
	10:00 - 10:30	Coffee Break and Poster Sessions
	10:30 - 11:30	Presentations: Virtual Reality/Agent and Telepresence
	11:30 - 12:30	Presentations: AI and Trustworthiness
	12:30 - 13:30	Lunch Break
	13:30 - 14:30	Presentations: Natural Language and Interaction
	14:30 - 15:30	Presentations: Non-verbal Interaction with Social Robots
	15:30 - 16:00	Coffee Break and Poster Sessions
	16:00 - 17:00	Presentations: Emotions
17:00 - 18:00	Travel to Gala Dinner venue	
18:00 - 21:00	Gala Dinner at InterContinental Doha Beach and Spa, Street 900, Bldg. No. 25, Zone 61, Al Dafna Doha Qatar	

Date	Time	Program
Dec 6, Wed	9:00 - 10:00	Keynote: Bruno Siciliano
	10:00 - 10:30	Coffee Break and Poster Sessions
	10:30 - 11:30	Special Session: Personalisation and Adaptation in Social Robotics
	11:30 - 12:30	Presentations: Social Robot Applications for the Older People
	12:30 - 13:30	Lunch Break
	13:30 - 14:30	Presentations: Social Robots as Advanced Educational Tools
	14:30 - 15:30	Presentations: Social Robot Navigation and Interaction Capabilities
	15:30 - 16:00	Coffee Break and Poster Sessions
	16:00 - 17:00	Presentations: Design and Evaluation of Robot Perception and Acceptance
	17:00 - 18:00	Awarding/Closing Ceremony
Dec 7, Thu	8:30 - 12:30	Workshops
	12:30 - 20:00	Social Trip (Optional; https://365adventures.me/what-we-do/icsr2023/)

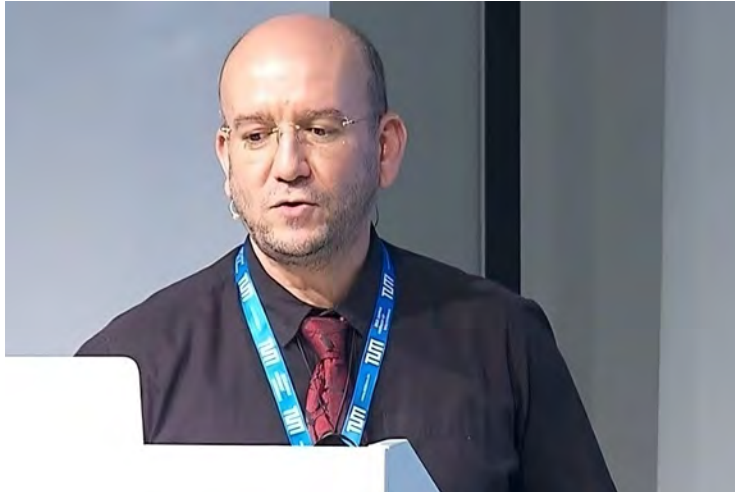
Professor Abderrahmane Kheddar

Full Member of the National Academy of Technology of France
Knight of the National Order of Merits of France

Title: Perspectives and Social Impacts of Humanoids as General Purpose Robots

When: December 5, 9:00-10:00 AM

Where: Qatar University, Student Affairs Building (Building i11), Auditorium



Professor Abderrahmane Kheddar received the B.S. degree in computer science from the Institut National d'Informatique, Algiers, Algeria, in 1990, and the M.Sc. and Ph.D. degrees in robotics from Pierre et Marie Curie University, Sorbonne University, Paris, France in 1993 and 1997, respectively. In 2008, he created the CNRS-AIST Joint Robotic Laboratory, an International Research Laboratory, located in Tsukuba, Japan, where he was the Director from 2008 to 2016 and Codirector from 2017 to 2021. In 2010 he also created and led the Interactive Digital Humans team until 2020, with the Laboratory of Computer Science, Robotics and Microelectronics of Montpellier, CNRS, University of Montpellier, France. His research interests include haptics, humanoids, and related bionics. Dr. Kheddar is a Founding Member of the IEEE Robotics and Automation Society (RAS) Chapter on Haptics, and the Co-Chair and Founding Member of the IEEE RAS Technical Committee on Model-Based Optimization. He is a Member of the Steering Committee of the IEEE Brain Initiative, an Editor of the IEEE Robotics and Automation Letters, and a Founding Member and the Deputy Editor-in-Chief for Cyborg and Bionics System (a Science partner journal). He was an Editor of the IEEE Transactions on Robotics, from 2013 to 2018. He is on the Editorial Board of other robotics journals such as the International Journal of Social Robotics. He is a Founding Member of the IEEE Transactions on Haptics and was in its Editorial Board from 2007 to 2010. Since 2020 he is the lead of the bionics initiative at CARTIGEN, University Hospital of Montpellier. He is a Fellow of the IEEE, a Fellow of the Asia-Pacific Artificial Intelligence Association and Vice-President of the International Artificial Intelligence Industry Alliance (AIIA). He is a Full Member of the National Academy of Technology of France and a Knight of the National Order of Merits of France.

Professor Bruno Siciliano

Professor of Robotics and Control at the University of Naples Federico II
Past President IEEE Robotics and Automation Society

Title: Robotics Meets AI & 5G — The Future is Now!

When: December 6, 9:00-10:00 AM

Where: Qatar University, Student Affairs Building (Building i11), Auditorium



Robotics research has advanced in the last two decades through an intensive collaboration with other disciplines and research communities. Multi-disciplinary approaches are more successful in addressing the combined issues of cognition (perception, awareness and mental models), and physical attributes (safety, dependability and dexterity) in the world of robotics. Previously separated from humans behind a fence, the new advanced robots (or cobots) are sharing our workspace and collaborating with us. Increasingly sophisticated built-in sensors enable them to see and feel the presence of humans and avoid accidental contact. The perception of robotics technology is improving, as we experience more ways it can positively affect our lives. In particular, the social and medical benefits of robots are starting to get more attention. In this scenario, the terms artificial intelligence (AI) and robotics are liberally used, and frequently interchanged today. However, the physical nature of a robotic system distinguishes it from the pure abstraction of AI. We are experiencing a transition from Information and Communication Technology (ICT) to InterAction Technology (IAT). The fifth generation of wireless technology (5G) will pave the way for a new generation of robots, some free to roam controlled via wireless rather than wired communication links while exploiting the vast computing and data storage resources of the cloud. Armed with these capabilities, robots can be controlled dynamically in real time and be connected to people and machines locally and globally. In the near future, 5G will fully enable applications with minimal latency such as “factory of the future”, “remote surgical training” and many others that were previously beyond the capabilities of both cellular and robotics technologies.

Presentation Schedule

Qatar University, Building i11 (Student Affairs Building), Auditorium

Tuesday Session

8:30-9:00	Welcome Remarks
9:00-10:00	Keynote: Perspective and Social Impact of Humanoids as General Purpose Robots, by Abderrahmane Kheddar
10:00-10:30	Coffee Break and Poster Sessions
10:30-11:30	Virtual Reality/Agent and Telepresence (Session Chairs: Mariacarla Staffa and Alireza Taheri)

10:30-10:45	Gesture Recognition for Human-Robot Interaction through Virtual Characters (053) Sandeep Reddy Sapienza Universita di Roma Sabbella Sara Kaszuba Sapienza Universita di Roma Francesco Leotta Sapienza Universita di Roma Daniele Nardi Sapienza Universita di Roma
10:45-11:00	Comprehensive Feedback Module Comparison for Autonomous Vehicle- Pedestrian Communication in Virtual Reality (020) Melanie Schmidt-Wolf University of Nevada Eelke Folmer University of Nevada David Feil-Seifer University of Nevada
11:00-11:15	Virtual Reality Serious Game with the TABAN Robot Avatar for Educational Rehabilitation of Dyslexic Children (065) O. Amiri Sharif University of Technology M. Shahab Sharif University of Technology M. M. Mohebati Sharif University of Technology S. A. Miryazdi Sharif University of Technology H. Amiri Quantitative Biosciences Institute - University of California

A. Meghdari	Islamic Azad University Sharif University of Technology
M. Alemi	Sharif University of Technology Islamic Azad University
H.R. Pouretamad	Shahid Beheshti University
A. Taheri	Sharif University of Technology

11:15-11:30 **Leveraging the RoboMaker service on AWS Cloud Platform for Marine Drone Digital Twin Construction (059)**

Mariacarla Staffa	Università degli Studi di Napoli "Parthenope"
Paola Barra	Università degli Studi di Napoli "Parthenope"
Emanuele Izzo	Università degli Studi di Napoli "Parthenope"

11:30-12:30 AI and Trustworthiness (Session Chairs: Hongsheng He and Hooman Samani)

11:30-11:45 **Two-Level Reinforcement Learning Framework for Self-Sustained Personal Robots (030)**

Koyo Fujii	Shibaura Institute of Technology
Patrick Holthaus	University of Hertfordshire
Hooman Samani	University of Hertfordshire University of the Arts London
Chinthaka Premachandra	Shibaura Institute of Technology
Farshid Amirabdollahian	University of Hertfordshire

11:45-12:00 **AI Planning From Natural-Language Instructions for Trustworthy Human-Robot Communication (078)**

Dang Tran	University of Alabama
Hui Li	University of Alabama
Hongsheng He	University of Alabama

12:00-12:15 **Is a humorous robot more trustworthy? (028)**

Barbara Sienkiewicz	Jagiellonian University
Bipin Indurkha	Jagiellonian University

12:15-12:30 **Measuring Willingness to Accept Social Robot's Recommendations (WASRR) (054)**

Isha Kharub	Western Sydney University
Michael Lwin	Western Sydney University
Aila Khan	Western Sydney University

Zhao Zou Western Sydney University
Omar Mubin Western Sydney University

12:30- 13:30 **Lunch Break**

13:30-14:30 **Natural Language and Interaction (Session Chairs: Thomas Sievers and Alvaro Castro Gonzalez)**

13:30-13:45 **A Human-Robot Mutual Learning System with Affect-Grounded Language Acquisition and Differential Outcomes Training (048)**

Alva Markelius University of Cambridge
Sofia Sjoberg University of Gothenburg
Zakaria Lemhauri CY Cergy Paris University
Laura Cohen CY Cergy Paris University
Martin Bergstrom University of Gothenburg
Robert Lowe University of Gothenburg
Lola Cañamero CY Cergy Paris University

13:45-14:00 **Talking like one of us: Effects of using regional language in a Humanoid Social Robot (043)**

Thomas Sievers University of Lübeck
Nele Russwinkel University of Lübeck

14:00-14:15 **Empowering Collaboration: A Pipeline for Human-Robot Spoken Interaction in Collaborative Scenarios (049)**

Sara Kaszuba Sapienza University of Rome
Julien Caposiena CPE Lyon
Sandeep Reddy Sapienza University of Rome
Sabbella
Francesco Leotta Sapienza University of Rome
Daniele Nardi Sapienza University of Rome

14:15- 14:30 **GERT: Transformers for Co-Speech Gesture Prediction in Social Robots (002)**

Javier Sevilla-Salcedo Universidad Carlos III de Madrid
Enrique Fernandez- Universidad Carlos III de Madrid
Rodicio
Jose Carlos Castillo Universidad Carlos III de Madrid
Alvaro Castro- Universidad Carlos III de Madrid
Gonzalez
Miguel A. Salichs Universidad Carlos III de Madrid

14:30-15:30 Non-verbal Interaction with Social Robots (Session Chairs: Jose Carlos Castillo Montoya and Yoonseob Lim)

- 14:30-14:45 **Explorative Study on the Non-verbal Backchannel Prediction Model for Human-Robot Interaction (037)**
Sukyung Seok Korea Institute of Science and Technology
Korea University
Tae-Hee Jeon Korea Institute of Science and Technology
Korea University
Yu-Jung Chae Korea Institute of Science and Technology
ChangHwan Kim Korea Institute of Science and Technology
Yoonseob Lim Korea Institute of Science and Technology
- 14:45-15:00 **Cultivating Expressivity and Communication in Robotic Objects: An Exploration into Adaptive Human-Robot Interaction (018)**
Pablo Osorio Tokyo University of Agriculture and Technology
Hisham Khalil The University of Tokyo
Simeon Capy Tokyo University of Agriculture and Technology
Gentiane Venture The University of Tokyo
- 15:00-15:15 **Data-driven Generation of Eyes and Head Movements of a Social Robot in Multiparty Conversation (058)**
Léa Haefflinger Grenoble Alpes University
Atos, France
Frédéric Elisei Grenoble Alpes University
Béatrice Bouchot Atos, France
Brice Varini Atos, France
Gérard Bailly Grenoble Alpes University
- 15:15-15:30 **RoboSync: Efficient Real-Time Operating System for Social Robots with Customizable Behaviour (063)**
Cheng Tang University of Waterloo
Yijing Feng University of Waterloo
Yue Hu University of Waterloo

15:30-16:00 Coffee Break and Poster Sessions

16:00-17:00 Emotions (Session Chairs: Silvia Rossi and Sangmin Kim)

16:00-16:15 Human Perception of Emotional Responses to Changes in Auditory Attributes of Humanoid Agents (044)

Zhao Zou	Western Sydney University
Fady Alnajjar	United Arab Emirates University
Michael Lwin	Western Sydney University
Abdullah Al Mahmud	Swinburne University of Technology
Muhammed Swavaf	United Arab Emirates University
Aila Khan	Western Sydney University
Omar Mubin	Western Sydney University

16:15-16:30 Exploring Response Strategies of Robotized Products in Problematic Situations: Analysis of Apology and Risk Communication Strategies (011)

SangMin Kim	Korea Institute of Science and Technology
JongSuk Choi	Korea Institute of Science and Technology
Sonya S.Kwak	Korea Institute of Science and Technology

16:30-16:45 Paired Robotic Devices with Subtle Expression of Sadness for Enriching Social Connectedness (038)

Misako Uchida	University of Tsukuba
Eleuda Nunez	University of Tsukuba
Modar Hassan	University of Tsukuba
Masakazu Hirokawa	NEC Corporation
Kenji Suzuki	University of Tsukuba

16:45-17:00 The Impact of Robots' Facial Emotional Expressions on Light Physical Exercises (045)

Nourhan Abdulazeem	University of Waterloo
Yue Hu	University of Waterloo

18:00-21:00 Gala Dinner at InterContinental Doha Beach and Spa, Street 900, Bldg. No. 25, Zone 61, Al Dafna Doha Qatar

Wednesday Session

9:00-10:00	Keynote: Robotics Meets AI & 5G - The future is Now! by Bruno Siciliano
10:00-10:30	Coffee Break and Poster Sessions
10:30-11:30	Special Session on Personalisation and Adaptation in Social Robotics (Session Chairs: Alessandra Rossi and Alessandro Di Nuovo)

10:30-10:45	Using Theory of Mind in Explanations for Fostering Transparency in Human- Robot Interaction (081) Georgios Angelopoulos Interdepartmental Center for Advances in Robotic Surgery Pasquale Imparato University of Naples Federico II Alessandra Rossi Interdepartmental Center for Advances in Robotic Surgery University of Naples Federico II Silvia Rossi Interdepartmental Center for Advances in Robotic Surgery University of Naples Federico II
10:45-11:00	Personalizing Multi-modal Human-Robot Interaction using Adaptive Robot Behavior (080) Marcos Maroto- University Carlos III of Madrid Gómez Allison Huisa-Rojas University Carlos III of Madrid Álvaro Castro- University Carlos III of Madrid González María Malfaz University Carlos III of Madrid Miguel Ángel Salichs University Carlos III of Madrid
11:00- 11:15	Evaluating Customers' Engagement Preferences for Multi-party Interaction with a Robot Bartender (079) Alessandra Rossi Università Degli Studi di Napoli Federico II Christian Menna Università Degli Studi di Napoli Federico II Emanuele Giordano Università Degli Studi di Napoli Federico II Silvia Rossi Università Degli Studi di Napoli Federico II
11:15-11:30	User perception of Teachable Robots: A comparative study of Teaching Strategies, Task Complexity and User Characteristics (077) Imene Tarakli Sheffield Hallam University

11:30-12:30 Social Robot Applications for the Older People (Session Chairs: Laura Fiorini and Nihan Karatas)

11:30-11:45 **Implementing Pro-social Rule Bending in an Elder-care Robot Environment (071)**
Rajitha Ramanayake University College Dublin
Vivek Nallur University College Dublin

11:45-12:00 **Robotic-Human-Machine-Interface for Elderly Driving: Balancing Embodiment and Anthropomorphism for Improved Acceptance (075)**
Nihan Karatas Nagoya University
Takahiro Tanaka Nagoya University
Yuki Yoshihara Nagoya University
Hiroko Tanabe Nagoya University
MotoshiKojima Advanced Mobility System Development Div.Toyota
Masato Endo Advanced Mobility System Development Div.Toyota
Shuhei Manabe Advanced Mobility System Development Div.Toyota

12:00-12:15 **Evaluating telepresence robot for supporting formal and informal caregivers in the case support service: a six-months case study (005)**
Laura Fiorini University of Florence
Jasmine Pani University of Florence
Erika Rovini University of Florence
Lara Toccafondi Umana Persone s.r.l, Grosseto
Novella Calamida Umana Persone s.r.l, Grosseto
Gianna Vignani Umana Persone s.r.l, Grosseto
Filippo Cavallo1 University of Florence

12:15-12:30 **Robot Companions and Sensors for Better Living: Defining Needs to Empower Low Socio-economic Older Adults at Home (024)**
Roberto Vagnetti Nottingham Trent University
Nicola Camp Nottingham Trent University
Matthew Story Sheffield Hallam University
Khaoula Ait-Belaid Loughborough University
Joshua Bamforth Sheffield Hallam University
Massimiliano Zecca Loughborough University

Alessandro Di Nuovo	Sheffield Hallam University
Suvo Mitra	Nottingham Trent University
Daniele Magistro	Nottingham Trent University

12:30-13:30 Lunch Break

13:30-14:30 **Social Robots as Advanced Educational Tools (Session Chairs: John-John Cabibihan and Oliver Bendel)**

13:30-13:45 **Teachable Robots Learn What to Say: Improving Child Engagement during Teaching Interaction (032)**

Rachel Love	Monash University
	Openstream. Inc
Philip R. Cohen	Openstream. Inc
Dana Kulić	Monash University

13:45-14:00 **Enhancing Hand Hygiene Practices through a Social Robot-Assisted Intervention in a Rural School in India (039)**

Amol Deshmukh	University of Glasgow
Kohinoor Monish Darda	ARISA (Advancement & Research in the Sciences & Arts) Foundation
Mugdha Mahesh Mhatre	Fergusson College
Ritika Pandey	Fergusson College
Aalisha R Jadhav	ARISA (Advancement & Research in the Sciences & Arts) Foundation
Emily Cross	ETH Zurich, University of Glasgow

14:00-14:15 **Evaluating Students' Experiences in Hybrid Learning Environments: A Comparative Analysis of Kubi and Double Telepresence Robots (052)**

Xiaoxuan Hei	Institut Polytechnique de Paris
Valentine Denis	Strate Design School
Pierre-Henri Orefice	Universite Paris-Saclay
Alia Afyouni	Strate Design School
Paul Laborde	Strate Design School
Damien Legois	Strate Design School
Ioana Ocnarescu	Strate Design School
Margarita Anastassova	Universite Paris-Saclay
Adriana Tapus	Institut Polytechnique de Paris

14:15-14:30 **Alpha Mini as a Learning Partner in the Classroom (017)**
 Oliver Bendel School of Business FHNW
 Andrin Allemann School of Business FHNW

14:30-15:30 Social Robot Navigation and Interaction Capabilities (Session Chairs: Saber Elsayed and Hooman Hedayati)

14:30-14:45 **Do we have to say this is a "telepresence robot"? Exploration of factors of face and speech style through telecommunication via robot (070)**
 Nungduk Yun The Graduate University for Advanced Studies
 National Institute of Informatics
 Seiji Yamada The Graduate University for Advanced Studies
 National Institute of Informatics

14:45-15:00 **Where Should I Stand? Robot Positioning in Human-Robot Conversational Groups (056)**
 Hooman Hedayati Kyoto University
 Takayuki Kanda Kyoto University

15:00-15:15 **The Influence of a Robot's Personality on Real-Time Explanations of Its Navigation (050)**
 Amar Halilovic Ulm University
 Senka Krivic University of Sarajevo

15:15-15:30 **Real-world evaluation of a university guidance and information robot (061)**
 Andrew Blair University of Glasgow
 Mary Ellen Foster University of Glasgow

15:30-16:30 Coffee Break and Poster Sessions

16:00-16:45 Design and Evaluation of Robot Perception and Acceptance (Session Chairs: Oskar Palinko and Silvia Rossi)

16:00-16:15 **Social robots in the wild and the novelty effect (033)**
 Merle Reimann Vrije Universiteit Amsterdam
 Jesper van de Graaf Amsterdam University of Applied Sciences
 Nina van Gulik Vrije Universiteit Amsterdam
 Stephanie van de Sanden Amsterdam University of Applied Sciences

Tibert Verhagen Amsterdam University of Applied Sciences
Koen Hindriks Vrije Universiteit Amsterdam

16:15-16:30

Interaction Matters When It Comes to Hand Disinfection using Robots at Hospitals (019)

Oskar Palinko¹ University of Southern Denmark
Robert Wendlandt University of Lubeck
Søren Udby Odense University Hospital
Franziska Uhing University of Applied Sciences Kiel
Johannes H. Fog University of Southern Denmark
Esben Hansen Odense University Hospital
Rasmus P. Junge University of Southern Denmark
Daniel G. Holm University of Southern Denmark
Mikkel Kipp University of Southern Denmark
Leon Bodenhausen University of Southern Denmark

16:30-16:45

Robotic music therapy assistant: A cognitive game playing robot (047)

Jwaad Hussain Middlesex University
Anthony Mangiacotti Middlesex University
Fabia Franco Middlesex University
Eris Chinellato Middlesex University

Virtual Reality Hand Tracking for Immersive Telepresence in Rehabilitative Serious Gaming (055)

Noaman Mazhar	Qatar University
Aya Gaballa	Qatar University
Amit Kumar Pandey	Socients AI and Robotics
John-John Cabibihan	Qatar University

Large-scale Swarm Control in Cluttered Environment (023)

Saber Elsayed	University of New South Wales
Mohamed Mabrok	Qatar University

A pilot usability study of a humanoid avatar to assist therapists of ASD children (025)

Carole Fournier	CNRS-University of Montpellier Centre Ressources Autisme Languedoc-Roussillon Center of Excellence for Autism and Neurodevelopmental Disorders
Cécile Michelon	Centre Ressources Autisme Languedoc-Roussillon Center of Excellence for Autism and Neurodevelopmental Disorders
Arnaud Tanguy Paul Audoyer	CNRS-University of Montpellier Centre Ressources Autisme Languedoc-Roussillon Center of Excellence for Autism and Neurodevelopmental Disorders
Véronique Granit	Centre Ressources Autisme Languedoc-Roussillon Center of Excellence for Autism and Neurodevelopmental Disorders
Amaria Baghdadli	University of Montpellier Centre Ressources Autisme Languedoc-Roussillon Center of Excellence for Autism and Neurodevelopmental Disorders
Abderrahmane Kheddar	CNRS-University of Montpellier CNRS-AIST Joint Robotics Laboratory

Feasibility Study on Parameter Adjustment for a Humanoid using LLM Tailoring Physical Care (040)

Tamon Miyake	Waseda University
Yushi Wan	Waseda University
Pin-chu Yang	Waseda University
Shigeki Sugano	Waseda University

The Effectiveness of Social Robots in Stress Management Interventions for University Students (060)

Andra Rice	Tilburg University
Katarzyna Klęczek	Tilburg University
Maryam Alimardani	Tilburg University

How language of interaction affects the user perception of a robot (029)

Barbara Sienkiewicz	Jagiellonian University
Gabriela Sejnova	Czech Technical University
Paul Gajewski	AGH University of Science and Technology
Michal Vavrecka	Czech Technical University
Bipin Indurkha	Jagiellonian University

A Tablet-Based Lexicon Application for Robot-Aided Educational Interaction of Children with Dyslexia (074)

M. Shahab	Sharif University of Technology
M. Mokhtari	Sharif University of Technology
S. A. Miryazdi	Sharif University of Technology
S. Ahmadi	Sharif University of Technology
M. M. Mohebati	Sharif University of Technology
M. Sohrabipour	Sharif University of Technology
O. Amiri	Sharif University of Technology
A. Meghdari	Sharif University of Technology
	Islamic Azad University
M. Alemi	Sharif University of Technology
	Islamic Azad University
H.R. Pouretamad	Shahid Beheshti University
A. Taheri	Sharif University of Technology

Clustering Social Touch Gestures for Human-Robot Interaction (007)

Ramzi Abou Chahine	University of East Anglia
Steven Vasquez	San Francisco State University
Hasti Seif	Arizona State University
Pooyan Fazli	Arizona State University

Feasibility study on eye gazing in socially assistive robotics: an intensive care unit scenario (008)

Alessandra Sorrentino	Universita Degli Studi di Napoli Federico II
Andrea Magnotta	University of Florence
Laura Fiorini	University of Florence BioRobotics Institute
Giovanni Piccinino	ITEM-OXYGEN S.r.l., Altamura, Bari, Italy
Alessandro Anselmo	ITEM-OXYGEN S.r.l., Altamura, Bari, Italy
Nicola Laurieri	ITEM-OXYGEN S.r.l., Altamura, Bari, Italy
Filippo Cavallo	University of Florence BioRobotics Institute

Attainable digital embodied storytelling using state of the art tools, and a litter touch (004)

Unai Zabala	University of Basque Country
Alexander Diez	University of Basque Country
Igor Rodriguez	University of Basque Country
Agnese Augello	Institute for High Performance Computing and Networking
Elena Lazkano	University of Basque Country

Investigating the Impact of Human-Robot Collaboration on Creativity and Team Efficiency: A Case Study on Brainstorming in Presence of Robots (073)

Alireza Taheri	Sharif University of Technology
Sean Khatiri	Sharif University of Technology
Amin Seyyedzadeh	Sharif University of Technology
Ali Ghorbandaei Pour	Sharif University of Technology
Alireza Siamy	Sharif University of Technology
Ali F. Meghdari	Sharif University of Technology Islamic Azad University

Detection of Rarely Occurring Behaviors Based on Human Trajectories and Their Associated Physical Parameters (036)

Hesham M. Shehata	Asilla, Inc.
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Nam Do	Asilla Vietnam
Shunl Inaoka	Asilla Vietnam
Trung Tran Quang	Asilla Vietnam

Can a robot collaborate with Alpana Artists? A concept design of an Alpana painting robot (069)

Farhad Ahmed	American International University- Bangladesh
Zarin Tasnim	American International University- Bangladesh
Zerin Tasnim	American International University- Bangladesh
Mohammad Shidujaman	Independent University, Bangladesh
Salah Uddin Ahmed	University of South-Eastern Norway

Trust Assessment with EEG Signals in Social Human-Robot Interaction (006)

Giulio Campagna	Aalborg University
Matthias Rehm	Aalborg University

Primitive Action Recognition based on Semantic Facts (022)

Adrien Vigné	Universite de Toulouse
Guillaume Sarthou	Universite de Toulouse
Aurélie Clodic	Universite de Toulouse

Emotional Understanding and Behavior Learning for Haru via Social Reinforcement Learning (026)

Lei Zhang	Ocean University of China
Chuanxiong Zheng	Ocean University of China
Hui Wang	Ocean University of China
Eric Nichols	Honda Research Institute Japan Co
Randy Gomez	Honda Research Institute Japan Co
Guangliang Li	Ocean University of China

Effect of Number of robots on Perceived Persuasion and Competence (009)

Abeer Alam	School of Business Western Sydney University
Michael Lwin	School of Business Western Sydney University
Aila Khan	School of Business Western Sydney University
Zhao Zou	School of Business Western Sydney University
Omar Mubin	School of Business Western Sydney University

A field study on Polish customers' attitude towards a service robot in a café (010)

Maria Kiraga
Zofia Samsel
Bipin Indurkha

AGH University of Science and Technology
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Jagiellonian University

Ethical, legal, and social requirements for assistance robots in health-care (042)

Marija Radic Fraunhofer Center for International Management and Knowledge Economy IMW
Agnes Vosen Fraunhofer Center for International Management and Knowledge Economy IMW
Sarah Kilz Fraunhofer Center for International Management and Knowledge Economy IMW

Social Perception and Scene Awareness in Human-Robot Interaction (051)

Sarwar Paplu University of Kaiserslautern-Landau
Prabesh Khadka University of Kaiserslautern-Landau
Bhalachandra Gajanana Bhat University of Kaiserslautern-Landau
Karsten Berns University of Kaiserslautern-Landau

User Perception of the Robot's Error in Heterogeneous Multi-Robot System Performing Sequential Cooperative Task (012)

Soyeon Shin LG Electronics8
Youngsun Kwon Electronics and Telecommunications Research Institute, Daejeon
Yoonseob Lim KIST Seoul
Sonya S. Kwak KIST Seoul

I am Relieved to Have You: Exploring the Effective Robot Type to Mitigate the User's Negative Emotions (013)

Dahyun Kang KIST Seoul
Sonya S. Kwak KIST Seoul

Automation of Detection and Interaction based on Large Language Model (003)

Wenkai Yang National University of Singapore
Yunze Leng National University of Singapore
Wanyue Jiang Qingdao Univeristy
Ruihang Ji National University of Singapore
Yiran Yue National University of Singapore
Zhonghan Gu National University of Singapore

Wanyang Shu National University of Singapore
Wenxin Wang National University of Singapore
Shuzhi Sam Ge National University of Singapore

Pepper as a Learning Partner in a Children's Hospital (016)

Sara Zarubica School of Business FHNW
Oliver Bendel School of Business FHNW

**Ethical Decision-Making for Social Robots in Elderly Care Scenario:
A Computational Approach (066)**

B. Sankar Indian Institute of Science
Siri Dubbaka Indian Institute of Information Technology

**Human-Robot Interaction Studies with Adults in Health and Wellbeing
Contexts - Outcomes and Challenges (067)**

Moojan Ghafurian University of Waterloo
Kerstin Dautenhahn University of Waterloo
Arsema Teka University of Waterloo
Shruti Chandra University of Waterloo
Samira Rasouli University of Waterloo
Ishan Baliyan University of Waterloo
Rebecca Hutchinson University of Waterloo

**Impact of Explanations on Transparency in HRI: A Study Using the
HRIVST Metric (064)**

Nandu Chandran Nair Universita' degli Studi di Napoli Federico II
Alessandra Rossi Universita' degli Studi di Napoli Federico II
Silvia Rossi Universita' degli Studi di Napoli Federico II

**Improving of Robotic Virtual Agent's errors accepted by agent's re-
action and human's preference (035)**

Takahiro Tsumura The Graduate University for Advanced Studies
National Institute of Informatics
Seiji Yamada National Institute of Informatics
The Graduate University for Advanced Studies

**A set of serious games scenarios based on Pepper robots as re-hab
standing frames for children with cerebral palsy (072)**

Leila Mouzehkesh Pirborj Western Sydney University
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Stephen Mathew Al Noor Training Centre for Persons with Disabilities

Muthu Kumar Nadimuthu

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The Ambiguity of Robot Rights (046)

Anisha Bontula

Oregon State University

David Danks

University of California San Diego

Naomi T. Fitter

Oregon State University

Workshops

Day	4-Dec	4-Dec	7-Dec
Time	8:30-12:30	14:00-17:00	8:30-12:30
Room 1 (i11-A105)	Robotic and Smart Solutions for Children with Autism and other learning disabilities	Global Robotics, Arts, and Sciences Synergies (GRASS)	ALTRUIST: social robots for personalized, continuous and adaptive assistance
Room 2 (i11-A109)	Human-Robot Interaction from Bits to Structure: Design Process, Materials, and Robotics	ASIMOV: Adaptive Social Interaction based on user's Mental Models and behavior in HRI	Co-Researching with the Humans-In-The-Loop: Using Participatory Methods, Research and Co-Design in HRI
Room 3 (i11-D122)		Game of Drones	
Room 4 (i11-D126)	Secure Communication Technologies for Social Robotics	Robotic Surgery: Myths and Realities	Robotics for Seniors (RoboSens)

List of Participants

Abdulazeem, Nourhan	Cabibihan, John-John
Abou Chahine, Ramzi	Calamidia, Novella
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Ahmadi, S	Camp, Nicola
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Ahmed, Salah Uddin	Capy, Siméon
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Alam, Abeer	Castro-González , Álvaro
Alemi, M	Castro-González, Álvaro
Alimardani, Maryam	Cavallo, Filippo
Allemann, Andrin	Chae, Yu-Jung
Al Mahmud, Abdullah	Chandran Nair, Nandu
Alnajjar, Fady	Chandra, Shruti
Amirabdollahian, Farshid	Chinellato, Eris
Amiri, H	Choi, Jongsuk
Amiri, O	Clodic, Aurélie
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Angelopoulos, Georgios	Cohen, Philip R.
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Audoyer, Paul	Damseh, Rafat
Augello, Agnese	Danks, David
Baghdadli, Amaria	Darda, Kohinoor
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Bamforth, Joshua	Deshmukh, Amol
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Fournier, Carole	Kheddar, Abderrahmane
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Gaballa, Aya	Kim, Sangmin
Gajewski, Paul	Kiraga, Maria
Ge, Shuzhi	Kleczek , Katarzyna
Ghafurian, Moojan	Kojima, Motoshi
Ghorbandaei Pour, Ali	Krivic, Senka
Gomez, Randy	Kulic, Dana
Granit, Véronique	Kwak, Sonyav
Gu, Zhonghan	Kwon, Youngsun
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Hussain, Jwaad	Lowe, Robert
Hutchinson, Rebecca	Lwin, Michael
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Miryazdi, S. A	Seifi, Hasti
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Miyake, Tamon	Seok, Sukyung
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Pani, Jasmine	Staffa, Mariacarla
Paplu, Sarwar	Story, Matt
Piccinino, Giovanni	Sugano, Shigeki
Pirborj, Leila	Suzuki, Kenji
Pouretmad, H. R	Swavaf, Muhammed
Premachandra, Chinthaka	Taheri, Alireza
Radic, Marija	Tanabe, Hiroko
Ramanayake, Rajitha	Tanaka, Takahiro
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Rice, Andra	Tarakli, Imene
Rodriguez, Igor	Tasnim, Zarin
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Rossi, Silvia	Teka, Arsema
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Salichs, Miguel Ángel	Uchida, Misako
Samani, Hooman	Vagnetti, Roberto
Samsel, Zofia	Van de Graaf, Jesper
Van de Sanden, Stephanie	Yamada, Seiji
Van Gulik, Nina	Yang, Pin-chu
Varini, Brice	Yang, Wenkai
Vasquez, Steven	Yoshihara, Yuki
Vavrecka, Michal	Yue, Yiran
Venture, Gentiane	Zabala, Unai

Verhagen, Tibert	Zarubica, Sara
Vigné, Adrien	Zecca, Massimiliano
Vignani, Gianna	Zhang, Lei
Vosen, Agnes	Zheng, Chuanxiong
Wang, Hui	Wang, Yushi
Zou, Zhao	

Useful Information

The venue for ICSR2023 will be at the **Student Affairs building (Building i11)** on Qatar University Campus.



How to get to the conference venue?

- **Metro:** Doha Metro is one of the newest forms of public transport available in Qatar. There are currently three lines in operation, red, gold and green. All passengers need to buy a travel card to use the Doha Metro. Single trip costs 2 QAR.

The Red Line: runs for 40 km from Al Wakra north to Lusail, with 17 stations that include West Bay QIC, Katara and Qatar University. This line also connects Hamad International Airport at Terminal 1 with downtown Doha.

The Green Line: runs east to west from Al Mansoura to Al Riffa. The line has 11 stations with notable stops like Hamad Hospital, Al Shaqab and Qatar National Library.

The Gold Line: an east-west route with 11 stations extending from Ras Bu Abboud to Al Aziziyah. Qatar National Museum and Souq Waqif are among the key stops along the Gold Line.

The conference venue, Qatar University, is served by the Red Line of Doha Metro system. Travelling from Doha's Hamad International Airport (HIA) to Qatar Uni-

iversity by metro takes approximately 40 minutes.

- **Taxi:** Taxis can be hired for short distances and trips. Karwa Taxi is operated by the state-run Mowasalat transport company. Besides having the biggest fleet of cars, it's the only taxi brand licensed to operate at Hamad International Airport. Other available services are the app-based Uber and Careem taxis.

Doha taxi fares are metered with a minimum tariff of 10 riyals, followed by 1.6 riyals per km during the day or 1.9 riyals per kilometre for trips at night. You can find taxis at roadside taxi ranks and almost every hotel and shopping mall. If you're not using a taxi app, call Karwa toll-free at 800-TAXI (8294) or at +974 4458 8888 (extra charge of 4 riyals levied).

- **Travel within QU campus:** The conference will be held in Student Affair Building Complex (Building I11) at Qatar University. It is within 15 minutes walking distance from the Qatar University metro station. Alternatively, campus bus services provide connection between the Metro station and a number of buildings within the university campus.

How We Started

In 2009, ICSR started with one idea, one aspiration: To breath life into machines through socially interactive robots. Social Robotics spread across the globe. We saw synergies across robotics, arts, and science. With these synergies, GRASS was born in 2023 and it will continue to spread forth.



Mission

The mission of GRASS is to facilitate and promote global synergies in Robotics, Arts, and Science through scientific events, business consortia, and design competitions with the goal to accelerate its outcomes for societal benefit.



GRASS is different:

It is not a complex organization but a simple platform.

It is not to create clusters but to serve as the synergetic bridge for clusters:

- From fundamental research to applied innovation.
- From funding to projects
- From prototypes to products
- From deployment to business
- From strategy to policy



GRASS Activities:

- Conference and design competition organization.
- Business and investment forum.
- GRASS congress and exhibition.
- GRASScast.
- Startups support and mentorship.
- Consultancy and services.
- Experts database.



Every GRASS Matters

We believe in the importance of every initiative, big or small, to create a vast green GRASSfield. GRASS is the grassroots platform facilitating this vision!

Our Logo: Every Character Matters



Join us and get an opportunity to be part of:

- GRASS Collaboration Network: Partner search portal for projects.
- Standardization Forum: Shape recommendations for socially-focused and human-centered robots.
- GRASS Outstanding Award Committee and Startup Forum: Join a platform for nurturing robotics and AI start-ups.

Be GRASS Leaders!

Contact us: admin@grassynergies.com



15th International Conference on Social Robotics

