QATAR UNIVERSITY

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**

📍 **Qatar University, Building i11 (Student Affairs Building)**

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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

Contents

Conference Information

Important Information ICSR 2023 Doha Qatar
Time: December 3-7, 2023
Registration: On site or online (https://evnk.co/ICSR23)
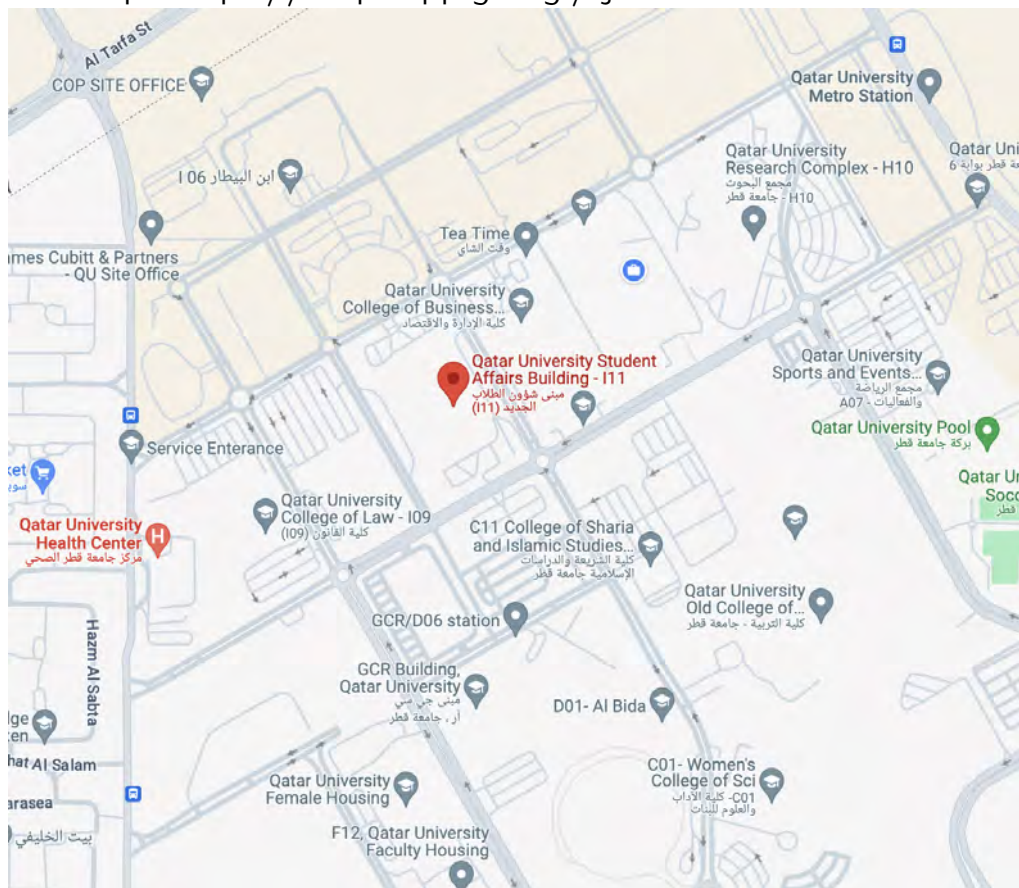Venue: Qatar University, Building i11 (Student Affairs Building)
Website: https://icsr23.qa
Contacting the Organizing Commitee: ICSR23@qu.edu.qa

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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	Aiman Erbad, Hamad Bin Khalifa University, Qatar
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	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

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Miguel Angel Salichs	Universidad Carlos III Madrid, Spain

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 Le Méridien City Center, Doha.

| 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
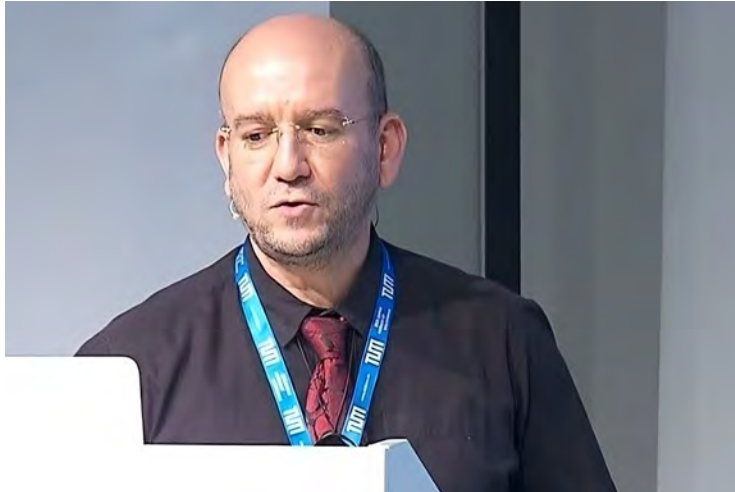
Professor Abderrahmane Kheddar received the B.S. degree in computer science from the Institut National d'Informatique, Algiers, Algeria, in 1990, and the M.Sc. and Ph.D. degrees in robotics from Pierre et Marie Curie University, Sorbonne University, Paris, France in 1993 and 1997, respectively. In 2008, 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

Time	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 Sabbella — Sapienza Universita di Roma
	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

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	A. Meghdari	Islamic Azad University
		Sharif University of Technology
	M. Alemi	Sharif University of Technology
		Islamic Azad University
	H.R. Pouretemad	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 Indurkhya | 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 Lemhauori	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 Sabbella	Sapienza University of Rome
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-Rodicio	Universidad Carlos III de Madrid
Jose Carlos Castillo	Universidad Carlos III de Madrid
Alvaro Castro-Gonzalez	Universidad Carlos III de Madrid
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 Leon Bodenhagen)**

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 Alessandra Sorrentino)** |

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 Le Méridien City Center, Doha, Conference Centre Street Doha, Qatar, 14022** |

Tuesday Session

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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-Gómez	University Carlos III of Madrid
	Allison Huisa-Rojas	University Carlos III of Madrid
	Álvaro Castro-González	University Carlos III of Madrid
	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	Universita Degli Studi di Napoli Federico II
	Christian Menna	Universita Degli Studi di Napoli Federico II
	Emanuele Giordano	Universita Degli Studi di Napoli Federico II
	Silvia Rossi	Universita 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

Alessandro Di Nuovo   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: Amol Deshmukh 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 Bodenhagen	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

Posters

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	CNRS-University of Montpellier
Paul Audoyer	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 Indurkhya	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. Pouretemad	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
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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.

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   AGH University of Science and Technology
Zofia Samsel   Université Paris Cité
Bipin Indurkhya   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 andWellbeing 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
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Improving of Robotic Virtual Agent's errors accepted by agent's reaction 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
Fady Alnajjar   UAE University
Stephen Mathew   Al Noor Training Centre for Persons with Disabilities

Muthu Kumar Nadimuthu   Al Noor Training Centre for Persons with Disabilities

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

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Abou Chahine, Ramzi	Calamidia, Novella
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Ahmed, Salah Uddin	Capy, Siméon
Ait-Belaid, Khaoula	Castillo, José Carlos
Alam, Abeer	Castro-González , Álvaro
Alemi, M	Castro-González, Álvaro
Alimardani, Maryam	Cavallo, Filippo
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Al Mahmud, Abdullah	Chandran Nair, Nandu
Alnajjar, Fady	Chandra, Shruti
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Fiorini, Laura	Khalil, Hisham

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Fujii, Koyo	Kim, ChangHwan
Gaballa, Aya	Kim, Sangmin
Gajewski, Paul	Kiraga, Maria
Ge, Shuzhi	Kleczek , Katarzyna
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Paplu, Sarwar	Story, Matt
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Premachandra, Chinthaka	Taheri, Alireza
Radic, Marija	Tanabe, Hiroko
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Rehm, Matthias	Tanguy, Arnaud
Reimann, Merle	Tapus, Adriana
Rice, Andra	Tarakli, Imene
Rodriguez, Igor	Tasnim, Zarin
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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-

versity 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.

GLOBAL ROBOTICS
Arts & Science Synergies
Grass

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 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

G r a s s

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

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