SuA1: 9:00-10:15 Horace Mann 138
Natural Language Interaction (Regular Session)

Chair: TBD

09:00-09:12	SuA1.1

Analysis of Multi-Party Human Interaction towards a Robot Mediator

Hisato Fukuda	Saitama Univ.
Yoshinori Kobayashi	Saitama Univ.
Yoshinori Kuno	Saitama Univ.
Akiko Yamazaki	Tokyo Univ. of Tech.
Keiko Ikeda	Kansai Univ.
Keiichi Yamazaki	Saitama Univ.

09:12-09:24	SuA1.2

ERICA: The ERATO Intelligent Conversational Android

Dylan F. Glas	ATR
Takashi Minato	ATR
Carlos Toshinori Ishi	ATR
Tatsuya Kawahara	Kyoto Univ.
Hiroshi Ishiguro	Osaka Univ.

09:24-09:36	SuA1.3

Leveraging Phantom Signals for Improved Voice-Based Human-Robot Interaction

Randy Gomez	Honda Research Inst.
Yurii Vasylkiv	Ivano-Frankivsk Nat'l Tech. Univ. of Oil and Gas
Keisuke Nakamura	Honda Research Inst.
Takeshi Mizumoto	Honda Research Inst.
Kazuhiro Nakadai	Honda Research Inst.

09:36-09:48	SuA1.4

Maintaining Awareness of the Focus of Attention of a Conversation: A Robot-Centric Reinforcement Learning Approach

Marynel Vázquez	Carnegie Mellon Univ.
Aaron Steinfeld	Carnegie Mellon Univ.
Scott E. Hudson	Carnegie Mellon Univ.

09:48-10:00	SuA1.5

Spatial References and Perspective in Natural Language Instructions for Collaborative Manipulation

Rosario Scalise	Carnegie Mellon Univ.
Shen Li	Carnegie Mellon Univ.
Henny Admoni	Carnegie Mellon Univ.

Siddhartha Srinivasa	Carnegie Mellon Univ.
Stephanie Rosenthal	Carnegie Mellon Univ.

10:00-10:12	SuA1.6

Using Natural Language Feedback in a Neuro-Inspired Integrated Multimodal Robotic Architecture

Johannes Twiefel	Univ. of Hamburg
Xavier Hinaut	INRIA
Marcelo Borghetti Soares	Univ. of Hamburg
Erik Strahl	Univ. of Hamburg
Stefan Wermter	Univ. of Hamburg

SuA2: 9:00-10:15 Horace Mann 150
Recognizing Human Motion, Actions, and Activities (Regular Session)

Chair: Mihoko Niitsuma Chuo Univ.

09:00-09:12	SuA2.1

Anticipating human activities from Object Interaction Cues

| Joan Aranda | Univ. Politècnica de Catalunya |
| Manuel Vinagre Ruiz | Inst. for Bioengineering of Catalonia |

09:12-09:24	SuA2.2

Building a Human Behavior Map from Local Observations

Zhan Wang	KTH Royal Inst. of Technology
Patric Jensfelt	KTH Royal Inst. of Technology
John Folkesson	KTH Royal Inst. of Technology

09:24-9:36	SuA2.3

Human Motion Assessment in Real Time Using Recurrent Self-Organization

German Ignacio Parisi	Univ. of Hamburg
Sven Magg	Univ. of Hamburg
Stefan Wermter	Univ. of Hamburg

09:36-09:48	SuA2.4

Low-Cost Scene Modeling Using a Density Function Improves Segmentation Performance

Vivek Sharma	ESAT-PSI/VISICS, KU Leuven
Şule Yildirim Yayilgan	Norwegian Univ. of Science and Technology
Luc Van Gool	ETH Zurich

09:48-10:00	SuA2.5

Towards a Model for Automatic Action Recognition for Social Robot Companions

Ingo Keller	Heriot-Watt Univ.
Markus Schmuck,	Heriot-Watt Univ.
Katrin Solveig Lohan	Heriot-Watt Univ.

10:00-10:12	SuA2.6

Unified Robot Learning of Action Labels and Motion Trajectories from 3D Human Skeletal Data

Chi Zhang	Univ. of Tennessee
Hao Zhang	Colorado School of Mines
Rui Guo	Univ. of Tennessee
Lynne Parker	Univ. of Tennessee

SuA3: 9:00-10:15	Milbank Chapel (Zankel 125)

Haptic Interaction, Control, and Feedback
(Regular Session)

Chair: TBD

09:00-09:12	SuA3.1

A Low-Cost Sensor Glove with Vibrotactile Feedback and Multiple Finger Joint and Hand Motion Sensing for Human-Robot Interaction

Paul Weber	TU Darmstadt
Elmar Rueckert	TU Darmstadt
Roberto Calandra	TU Darmstadt
Jan Peters	TU Darmstadt
Philipp Beckerle	TU Darmstadt

09:12-09:24	SuA3.2

Equipping the Baxter Robot with Human-Inspired Hand-Clapping Skills

| Naomi Fitter | Univ. of Pennsylvania |
| Katherine Kuchenbecker | Univ. of Pennsylvania |

09:24-9:36	SuA3.3

Haptic Wrist Guidance Using Vibrations for Human-Robot Teams

Marco Aggravi	Univ. of Siena
Gionata Salvietti	Univ. of Siena
Domenico Prattichizzo	Univ. of Siena

09:36-09:48	SuA3.4

Modeling the Interaction Force During a Haptically-Coupled Cooperative Manipulation

| Ehsan Noohi | Univ. of Illinois at Chicago |
| Milos Zefran | Univ. of Illinois at Chicago |

09:48-10:00	SuA3.5

Towards a Novel Generation of Haptic and Robotic Interfaces: Integrating Affective Physiology in Human-Robot Interaction

Matteo Bianchi	UIstituto Italiano di Tecnologia
Gaetano Valenza	Univ. of Pisa
Alberto Greco	Univ. of Pisa
Mimma Nardelli	Univ. of Pisa
Edoardo Battaglia	Univ. of Pisa
Antonio Bicchi	UIstituto Italiano di Tecnologia
Enzo Pasquale Scilingo	Univ. of Pisa

10:00-10:12	SuA3.6

Wrist and Grasp Myocontrol: Online Validation in a Goal-Reaching Task

Markus Nowak	DLR
Beatrice Aretz	DLR
Claudio Castellini	DLR

SuB1: 10:45-11:45	Horace Mann 138

Art and Aesthetic Interaction (Regular Session)

Chair: Wendy Ju	Stanford Univ.

10:45-10:57	SuB1.1

How Violinists Alter Sound Volume and Tempo When Expressing Bright and Dark Timbres

| Koji Shibuya | Ryukoku Univ. |
| Natsumi Hasegawa | Ryukoku Univ. |

10:57-11:09	SuB1.2

Integration Framework for Speech Processing with Live Visualization Interfaces

David Brodeur	Univ. de Sherbrooke
Francois Grondin	Univ. de Sherbrooke
Yazid Attabi	Ctr. de Recherche Informatique de Montréal
Pierre Dumouchel	École de Technologie Supérieure
Francois Michaud	Univ. de Sherbrooke

11:09-11:21	SuB1.3

Interacting with Curious Agents: User Experience with Interactive Sculptural Systems

Matthew Tsz Kiu Chan	Univ. of Waterloo
Robert B. Gorbet	Univ. of Waterloo
Philip Beesley	Philip Beesley Architect
Dana Kulic	Univ. of Waterloo

11:21-11:33	SuB1.4

Painting Creation Method by Impression Feedback to a Painting Generator from an Impression Estimator

Tetsuro Sato	Tokyo Univ. of Agriculture and Tech.
Kotaro Hayashi	Tokyo Univ. of Agriculture and Tech.
Ikuo Mizuuchi	Tokyo Univ. of Agriculture and Tech.

11:33-11:45	SuB1.5

Robot Humor: How Self-Irony and Schadenfreude Influence People's Rating of Robot Likability

Nicole Mirnig	Univ. of Salzburg
Susanne Stadler	Univ. of Salzburg
Gerald Stollnberger	Univ. of Salzburg
Manuel Giuliani	Univ. of Salzburg
Manfred Tscheligi	Univ. of Salzburg

SuB2: 10:45-11:45	Horace Mann 150

Programming Robots (Regular Session)

Chair: TBD

10:45-10:57	SuB2.1

ActBot: Sharing High-Level Robot AI Scripts

Clement Creusot	IBM Research Tokyo

10:57-11:09	SuB2.2

Augmented Reality for Industrial Robot Programmers: Workload Analysis for Task-based, Augmented Reality-supported Robot Control

Susanne Stadler	Univ. of Salzburg
Kevin Kain	Univ. of Salzburg
Manuel Giuliani	Univ. of Salzburg
Nicole Mirnig	Univ. of Salzburg
Gerald Stollnberger	Univ. of Salzburg
Manfred Tscheligi	Univ. of Salzburg

11:09-11:21	SuB2.3

Design and Evaluation of an End-User Friendly Tool for Robot Programming

Nina Buchina	Eindhoven Univ. of Technology
Sherin Kamel	Eindhoven Univ. of Technology
Emilia I. Barakova	Eindhoven Univ. of Technology

11:21-11:33	SuB2.4

Robot Programming by Non-Experts: Intuitiveness and Robustness of One-Shot Robot Programming

Eric M. Orendt	Univ. of Bayreuth
Myriel Fichtner	Univ. of Bayreuth
Dominik Henrich	Univ. of Bayreuth

11:33-11:45	SuB2.5

Simplified Industrial Robot Programming: Effects of Errors on Multimodal Interaction in WoZ Experiment

Zdeněk Materna	Brno Univ. of Technology
Michal Kapinus	Brno Univ. of Technology
Michal Spanel	Brno Univ. of Technology
Vitezslav Beran	Brno Univ. of Technology
Pavel Smrz	Brno Univ. of Technology

SuB3: 10:45-11:45	Milbank Chapel (Zankel 125)

Interaction Strategies (Regular Session)

Chair: TBD

10:45-10:57	SuB3.1

A Values-Based Dialogue Strategy to Build Motivation for Conversation with Autonomous Conversational Robots

Uchida Takahisa	ATR, Osaka Univ.
Takashi Minato	ATR
Hiroshi Ishiguro	ATR, Osaka Univ.

10:57-11:09	SuB3.2

Dynamic Generation and Refinement of Robot Verbalization

Vittorio Perera	Carnegie Mellon Univ.
Sai Selveraj	Carnegie Mellon Univ.
Stephanie Rosenthal	Carnegie Mellon Univ.
Manuela Veloso	Carnegie Mellon Univ.

11:09-11:21	SuB3.3

How to Improve Human-Robot Interaction with Conversational Fillers

Noel Wigdor	TNO Soesterberg
Joachim de Greeff	Delft Univ. of Tech.
Rosemarijn Looije	TNO
Mark Neerincx	TNO

11:21-11:33	SuB3.4

Referential Practices. Effects of a Museum Guide Robot Suggesting a Deictic 'Repair' Action to Visitors Attempting to Orient to an Exhibit

Karola Pitsch	Univ. of Duisburg-Essen
Timo Dankert	Bielefeld Univ.

Raphaela Gehle	Univ. of Duisburg-Essen, Bielefeld Univ.
Sebastian Wrede	Bielefeld Univ.

11:33-11:45	SuB3.5

Speech Driven Trunk Motion Generating System Based on Physical Constraint

Kurima Sakai	ATR, Osaka Univ.
Takashi Minato	ATR
Carlos Toshinori Ishi	ATR
Hiroshi Ishiguro	ATR, Osaka Univ.

SuC1: 14:30-15:30   Horace Mann 138

K-12 Robotics: Young Future Researchers in Human-Robot Interactive Communication
(Invited Session)

In this session, we invite local K-12 students that are young future researchers in HRI to come present their robots and work in a poster/demonstration format. We encourage all our RO-MAN conference attendees to come and interact with the next generation HRI researchers.

SuC2: 14:30-15:30   Horace Mann 150

Learning from Feedback and Environments (Regular Session)

Chair:
Fulvio Mastrogiovanni	Univ. of Genoa

14:30-14:42	SuC2.1

Analysis of Illumination Robustness in Long-Term Object Learning

Ingo Keller	Heriot-Watt Univ.
Katrin Solveig Lohan	Heriot-Watt Univ.

14:42-14:54	SuC2.2

Exploring Implicit Human Responses to Robot Mistakes in a Learning from Demonstration Task

Cory Hayes	Univ. of Notre Dame
Maryam Moosaei	Univ. of Notre Dame
Laurel D. Riek	Univ. of Notre Dame

14:54-15:06	SuC2.3

Grounding Action Parameters from Demonstration

Kalesha Bullard	Georgia Inst. of Tech.
Baris Akgun	Georgia Inst. of Tech.
Sonia Chernova	Georgia Inst. of Tech.
Andrea Lockerd Thomaz	Univ. of Texas at Austin

15:06-15:18	SuC2.4

Training a Robot with Evaluative Feedback and Unlabeled Guidance Signals

Anis Najar	Inst. des Sys. Intelligents et de Robotique
Olivier Sigaud	Univ. Pierre et Marie Curie
Mohamed Chetouani	Univ. Pierre et Marie Curie

15:18-15:30	SuC2.5

What's in a Primitive? Identifying Reusable Motion Trajectories in Narrated Demonstrations

Anahita Mohseni-Kabir	Worcester Poly. Inst.
Sonia Chernova	Worcester Poly. Inst.
Charles Rich	Georgia Inst. of Tech.
Victoria Wu	Worcester Poly Inst.

SuC3: 14:30-15:30   Milbank Chapel (Zankel 125)

Interfaces (Regular Session)

Chair: Daniel Szafir	Univ. of Colorado Boulder

14:30-14:42	SuC3.1

Look Where You're Going: Visual Interfaces for Robot Teleoperation

Jim Vaughan	FX Palo Alto Lab.
Don Kimber	FX Palo Alto Lab.
Kratz Sven	FX Palo Alto Lab.

14:42-14:54	SuC3.2

Motion Synopsis for Robot Arm Trajectories

Daniel Rakita	Univ. of Wisconsin–Madison
Bilge Mutlu	Univ. of Wisconsin–Madison
Michael Gleicher	Univ. of Wisconsin–Madison

14:54-15:06	SuC3.3

Natural User Interface for Lighting Control: Case Study on Desktop Lighting Using Modular Robots

Mehmet Mutlu	EPFL
Stephane Bonardi	EPFL
Massimo Vespignani	EPFL, BIOROB
Simon Hauser	EPFL, BIOROB
Alexandre Bernardino	IST
Auke Ijspeert	EPFL

15:06-15:18	SuC3.4

Projecting Robot Intentions into Human Environments

Rasmus S. Andersen	Aalborg Univ.
Ole Madsen	Aalborg Univ.
Thomas B. Moeslund	Aalborg Univ.
Heni Ben Amor	Arizona State Univ.

15:18-15:30	SuC3.5

Realizing Mixed-Reality Environments with Tablets for Intuitive Human-Robot Collaboration for Object Manipulation Tasks

Jared Frank	NYU
Matthew Moorhead	NYU
Vikram Kapila	NYU

SuD1: 16:00-17:00	Horace Mann 138

K-12 Robotics: Young Future Researchers in Human-Robot Interactive Communication (Invited Session)

In this session, we invite local K-12 students that are young future researchers in HRI to come present their robots and work in a poster/demonstration format. We encourage all our RO-MAN conference attendees to come and interact with the next generation HRI researchers.

SuD2: 16:00-17:00	Horace Mann 150

SS: Assistive Technologies in Daily Living Environments (Special Session)

Chair: Kazuyoshi Wada	Tokyo Metropolitan Univ.
Co-Chair:	
Mihoko Niitsuma	Chuo Univ.

16:00-16:12	SuD2.1

Analysis of Category Estimation for Cloud Based Chat Robot

Eri sato-Shimokawara	Tokyo Metropolitan Univ.
Yoko Shinoda	Tokyo Metropolitan Univ.
Tomoya Takatani	Toyota Motor Co.
Haeyeon Lee	Toyota Motor Co.
Kazuyoshi Wada	Tokyo Metropolitan Univ.
Toru Yamaguchi	Tokyo Metropolitan Univ.

16:12-16:24	SuD2.2

That Robot Is Not for Me: Addressing Stereotypes of Aging in Assistive Robot Design

Hee Rin Lee	Indiana Univ.
Haodan Tan	Indiana Univ.

Selma Sabanovic	Indiana Univ.
16:24-16:36	SuD2.3

Narratives and Emotions in Seniors Affected by Dementia: A Comparative Study Using a Robot and a Toy

Iolanda Iacono	Univ. of Siena
Patrizia Marti	Univ. of Siena

16:36-16:48	SuD2.4

Update of Human-Robot Relationship Based on Ethologically Inspired Human-Robot Communication History

Honoka Kanai	Chuo Univ.
Mihoko Niitsuma	Chuo Univ.

16:48-17:00	SuD2.5

Investigation of Appropriate Response Time for an Animal Type Robot

Kazuyoshi Wada	Tokyo Metropolitan Univ.
Yuhri Asano	Tokyo Metropolitan Univ.

SuD3: 16:00-17:00	Milbank Chapel (Zankel 125)

Proxemics and Social Formation (Regular Session)

Chair: Frank Broz	Heriot-Watt Univ.
16:00-16:12	SuD3.1

A Fuzzy Data-Based Model for Human-Robot Proxemics

Tomasz Kosiński	Łódź Univ. of Tech.
Mohammad Obaid	Koc Univ.
Paweł Woźniak	t2ilab
Morten Fjeld	t2ilab
Jacek Kucharski	Łódź Univ. of Tech.

16:12-16:24	SuD3.2

Analysis of an Adaptive Strategy for Equitably Approaching and Joining Human Interactions

Vishnu K. Narayanan	INRIA
Anne Spalanzani	INRIA, UPMF
Ren Luo	National Taiwan Univ.
Marie Babel	IRISA

16:24-16:36	SuD3.3

Robots Learning How and Where to Approach People

Omar Adair Islas Ramírez	Univ. Pierre Et Marie Curie
Harmish Khambhaita	LAAS-CNRS
Raja Chatila	ISIR

| Mohamed Chetouani | Univ. Pierre Et Marie Curie |
| Rachid Alami | LAAS-CNRS |

| 16:36-16:48 | SuD3.4 |

Stop! That is Close Enough. How Body Postures Influence Human-Robot Proximity

Mohammad Obaid	Koc Univ.
Eduardo Sandoval	Univ. of Canterbury
Jakub Zlotowski	Univ. of Canterbury
Elena Moltchanova	Univ. of Canterbury
Christina Anne Basedow	Jacobs Univ. Bremen
Christoph Bartneck	Univ. of Canterbury

| 16:48-17:00 | SuD3.5 |

Utilizing Bluetooth Low Energy to Recognize Proximity, Touch and Humans

Marcus Scheunemann	Univ. of Hertfordshire
Kerstin Dautenhahn	Univ. of Hertfordshire
Maha Salem	Univ. of Hertfordshire
Ben Robins	Univ. of Hertfordshire