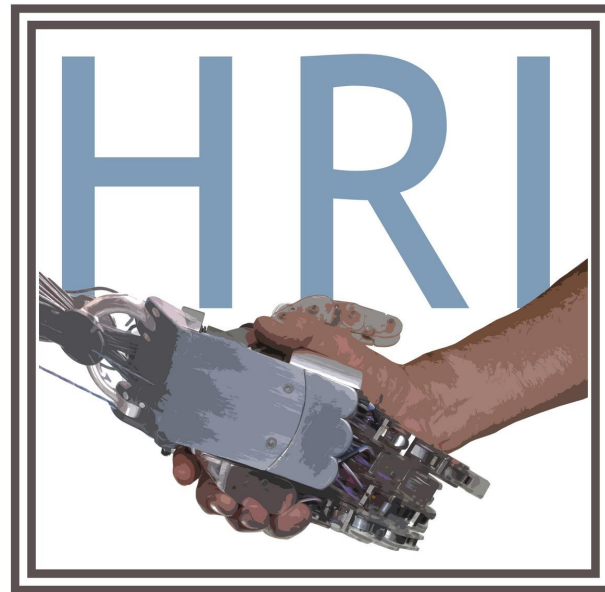




## CONFERENCE PROGRAM

# Third International Conference on Human-Robot Interaction (HRI 2008)

12-15 March 2008  
Amsterdam, The Netherlands



[www.hri2008.org](http://www.hri2008.org)



|             | Thursday (March 13, 2008)   | Friday (March 14, 2008)  | Saturday (March 15, 2008)   |
|-------------|---|--|---|
| 09:00       | Welcome   | Announcements  | Summary Young Researchers Workshop  |
| 09:10       | Keynote: Herb Clark   | Keynote: Raja Chatila  | Keynote: Harold Bekkering   |
| 10:10       | Short Break   | Short Break  | Short Break   |
| 10:20       | Generating Haptic-Ostensive Referring Expressions in Cooperative, Task-based Human-Robot Dialogue | Combining Dynamical Systems Control and Programming by Demonstration for Teaching Discrete Bimanual Coordination Tasks to a Humanoid Robot | A comparative psychophysical and EEG study of different feedback modalities for HRI                         |
| 10:45       | Object Schemas for Responsive Robotic Language Use  | Learning Polite Behavior with Situation Models   | Theory of Mind (ToM) on Robots: A Functional Neuroimaging Study   |
| 11:10       | Coffee Break  | Coffee Break   | Coffee Break  |
| 11:40       | Understanding Human Intentions via Hidden Markov Models in Autonomous Mobile Robots               | Towards Combining UAV and Sensor Operator Roles in UAV-Enabled Visual Search   | Robots in Organizations: The Role of Workflow, Social, and Environmental Factors in Human-Robot Interaction |
| 12:05       | Poster Teaser Presentations I   | How training and experience affect the benefits of autonomy in a dirty-bomb experiment   | Crew Roles and Operational Protocols for Rotary-Wing Micro-UAVs in Close Urban Environments                 |
| 12:30       | Lunch Break   | Lunch Break<br>Live Demo Session   | Lunch Break<br>Informal Posters<br>Student Lego Competition   |
| 14:00       | Using a Robot Proxy to Create Common Ground in Exploration Tasks                                  | Simultaneous Teleoperation of Multiple Social Robots   | Concepts about the capabilities of computers and robots: A test of the scope of adults' theory of mind      |
| 14:25       | How Quickly Should Communication Robots Respond?  | A Point-and-Click Interface for the Real World: Laser-Designation of Targets for a Mobile Manipulator                                      | Beyond Dirty, Dangerous and Dull: What Everyday People Think Robots Should Do                               |
| 14:50       | Spiral response-cascades hypothesis -Intrapersonal responding-cascade in gaze interaction         | Three Dimensional Tangible User Interface for Controlling a Robotic Team   | Design Patterns for Sociality in Human-Robot Interaction  |
| 15:15       | Coffee Break  | Coffee Break   | Coffee Break  |
| 15:45       | A Hybrid Algorithm for Tracking and Following People using a Robotic Dog                          | Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/Reactive Robot Architecture - Part I: Motivation and Philosophy       | Video Session   |
| 16:10       | Reasoning for a multi-modal service robot considering uncertainty in human-robot interaction      | Panel: Robo-ethics   |   |
| 16:25       |   |  | Panel: What is HRI?   |
| 16:35       |   |  |   |
| 17:00       | Poster Teaser Presentations II  | Break  | Awards, HRI 2009, Closing Remarks   |
| 17:10       |   |  |   |
| 17:30-20:30 | Poster Session, Microsoft Reception   | IOPMMI Boat trip and Reception in City Hall  |   |

## **HRI-2008 Papers (alphabetical order by title)**

A Comparative Psychophysical and EEG Study of Different Feedback Modalities for HRI  
*Xavier Perrin, Ricardo Chavarriaga, Celine Ray, Roland Siegwart, Jose del R. Millan*

A Hybrid Algorithm for Tracking and Following People using a Robotic Dog  
*Martijn Liem, Arnoud Visser, Frans Groen*

A Point-and-Click Interface for the Real World: Laser Designation of Objects for Mobile Manipulation  
*Charlie Kemp, Cressel Anderson, Hai Nguyen, Alexander Trevor, Zhe Xu*

A Semi-autonomous Communication Robot - A Field Trial at a Train Station -  
*Masahiro Shiomi, Daisuke Sakamoto, Takayuki Kanda, Carlos Toshinori Ishi, Hiroshi Ishiguro, Norihiro Hagita*

Achieving Fluency through Practice in Human-Robot Collaboration  
*Guy Hoffman, Cynthia Breazeal*

Assessing Cooperation in Human Control of Heterogeneous Robots  
*Jijun Wang, Huadong Wang, Michael Lewis*

Behaviour Delay and Robot Expressiveness in Child-Robot Interactions: A User Study on Interaction Kinesics  
*Ben Robins, Kerstin Dautenhahn, Rene te Boekhorst, Chrystopher L. Nehaniv*

Beyond Dirty, Dangerous and Dull: What Everyday People Think Robots Should Do  
*Leila Takayama, Wendy Ju, Clifford Nass*

Combining Dynamical Systems Control and Programming by Demonstration for Teaching Discrete Bimanual Coordination Tasks to a Humanoid Robot  
*Elena Gribovskaya, Aude Billard*

Compass Visualization for Human-Robotic Interaction  
*Curtis Humphrey and Julie A. Adams*

Concepts about the capabilities of computers and robots: A test of the scope of adults' theory of mind  
*Daniel Levin, Stephen Killingsworth, Megan Saylor*

Construction and Evaluation of a Model of Natural Human Motion based on Motion Diversity  
*Takashi Minato, Hiroshi Ishiguro*

Crew Roles and Operational Protocols for Rotary-Wing Micro-UAVs in Close Urban Environments  
*Robin Murphy, Kevin Pratt, Jenny Burke*

Crossmodal Content Binding in Information-Processing Architectures  
*Henrik Jacobsson, Nick Hawes, Geert-Jan Kruijff, Jeremy Wyatt*

Decision-Theoretic Human-Robot Communication  
*Tobias Kaupp, Alexei Makarenko*

Design Patterns for Sociality in Human-Robot Interaction  
*Peter Kahn, Nathan Freier, Takayuki Kanda, Hiroshi Ishiguro, Jolina Ruckert, Rachel Severson, Shaun Kane*

Development and Evaluation of a Flexible Interface for a Wheelchair Mounted Robotic Arm  
*Katherine Tsui, Holly Yanco, David Kontak, Linda Beliveau*

Enjoyment, intention to use and actual use of a conversational robot by elderly people  
*Marcel Heerink, Ben Kruse, Bob Wielinga, Vanessa Evers*

Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/Reactive Robot Architecture - Part I: Motivation and Philosophy  
*Ronald Arkin*

Housewives or Technophiles?: Understanding Domestic Robot Owners  
*Ja-Young Sung, Rebecca Grinter, Henrik Christensen, Lan Guo*

How Close? Model of Proximity Control for Information-presenting Robots  
*Fumitaka Yamaoka, Takayuki Kanda, Hiroshi Ishiguro, Norihiro Hagita*

How People Anthropomorphize Robots  
*Susan Fussell, Sara Kiesler, Leslie Setlock, Victoria Yew*

How Quickly Should Communication Robots Respond?  
*Toshiyuki Shiwa, Takayuki Kanda, Michita Imai, Hiroshi Ishiguro, Norihiro Hagita*

How training and experience affect the benefits of autonomy in a dirty-bomb experiment  
*David Bruemmer, Curtis Nielsen, David Gertman*

Human Emotion and the Uncanny Valley: A GLM, MDS, and ISOMAP Analysis of Robot Video Ratings  
*Chin-Chang Ho, Karl MacDorman, Z. A. Dwi Pramono*

Human to Robot Demonstrations of Routine Home Tasks: Exploring the Role of the Robot's Feedback  
*Nuno Otero, Aris Alissandrakis, Kerstin Dautenhahn, Chrystopher Nehaniv, Dag Syrdal, Kheng Lee Koay*

Hybrid Tracking of Human Operators using IMU/UWB Data Fusion by a Kalman Filter  
*J. A. Corrales, F. A. Candelas, F. Torres*

Integrating vision and audition within a cognitive architecture to track conversations  
*Greg Trafton, Magdalena Bugajska, Benjamin Franssen, Raj Ratwani*

Learning Polite Behavior with Situation Models  
*James CROWLEY, Remi BARRAQUAND*

Loudness Measurement of Human Utterance to a Robot in Noisy Environment  
*Satoshi KAGAMI, Yoko SASAKI, Simon THOMPSON, Tomoaki FUJIHARA, Tadashi ENOMOTO, Hiroshi MIZOGUCHI*

Multi-Thresholded Approach to Demonstration Selection for Interactive Robot Learning  
*Sonia Chernova, Manuela Veloso*

Object Schemas for Responsive Robotic Language Use  
*Kai-yuh Hsiao, Soroush Vosoughi, Stefanie Tellex, Rony Kubat, Deb Roy*

Reasoning for a Multi-Modal Service Robot Considering Uncertainty in Human-Robot Interaction  
*Sven Schmidt-Rohr, Steffen Knoop, Martin L<sup>^</sup>sch, R<sup>^</sup>diger Dillmann*

Relational vs. Group Self-Construction: Untangling the Role of National Culture in HRI  
*Vanessa Evers, Heidy Maldonado, Talia Brodecki, Pamela Hinds*

Robot Social Presence and Gender: Do Females View Robots Differently than Males?  
*Paul Schermerhorn, Matthias Scheutz, Charles Crowell*

Robotic Animals Might Aid in the Social Development of Children with Autism  
*Cady Stanton, Peter Kahn, Rachel Severson, Jolina Ruckert, Brian Gill*

Robotics Operator Performance in a Military Multi-Tasking Environment  
*Jessie Chen, Michael Barnes*

Robots in Organizations: The Role of Workflow, Social, and Environmental Factors in Human-Robot Interaction  
*Bilge Mutlu, Jodi Forlizzi*

Simultaneous Teleoperation of Multiple Social Robots  
*Dylan Glas, Takayuki Kanda, Hiroshi Ishiguro, Norihiro Hagita*

Spiral response-cascade hypothesis -Intrapersonal responding-cascade in gaze interaction-  
*Yuichiro Yoshikawa, Shunsuke Yamamoto, Hidenobu Sumioka, Hiroshi Ishiguro, Minoru Asada*

Supervision and Motion Planning for a Mobile Manipulator Interacting with Humans  
*Emrah Akin Sisbot, Aurelie Clodic, Rachid Alami, Maxime Ransan*

The Roles of Haptic-Ostensive Referring Expressions in Cooperative, Task-based Human-Robot Dialogue  
*Mary Ellen Foster, Ellen Gurman Bard, Markus Guhe, Robin L. Hill, Jon Oberlander, Alois Knoll*

Theory of Mind (ToM) on Robots: A Functional Neuroimaging Study  
*Frank Hegel, Soeren Krach, Tilo Kircher, Britta Wrede, Gerhard Sagerer*

Three Dimensional Tangible User Interface for Controlling a Robotic Team  
*Paul Lapedes, Ehud Sharlin, Mario Costa Sousa*

Toward Multimodal Human-Robot Interaction in Large Scale Virtual Environment  
*Pierre Boudoin, Christophe Domingues, Samir Otmane, Nassima Ouramdane, Malik Mallem*

Towards Combining UAV and Sensor Operator Roles in UAV-Enabled Visual Search  
*Joseph Cooper, Michael Goodrich*

Understanding Human Intentions via Hidden Markov Models in Autonomous Mobile Robots  
*Richard Kelley, Alireza Tavakkoli, Christopher King, Monica Nicolescu, Mircea Nicolescu, George Bebis*

Using a Robot Proxy to Create Common Ground in Exploration Tasks  
*Kristen Stubbs, David Wettergreen, Illah Nourbakhsh*