

New Frontiers in Human-Robot Interaction

A two-day symposium at AISB 2010 (31st March – 1st April 2010), held at
De Montfort University, Leicester, United Kingdom
<http://homepages.feis.herts.ac.uk/~comqkd/HRI-AISB2010-Symposium.html>

DRAFT Programme

Wednesday 31st March 2010

9:00-9:05 Opening and Welcome

9:05-10.30 Session: Multi-modal Human-Robot Interaction (4 contributed papers, 15 min each for presentation, followed by a 25 min discussion of all session papers, chaired by Kerstin Dautenhahn)

Expressive Gestures Displayed by a Humanoid Robot during a Storytelling Application

Catherine Pelachaud, Rodolphe Gelin, Jean-Claude Martin and Quoc Anh Le (CNRS, LTCI Telecom ParisTech, CNRS LIMSI, France; Aldebaran, France)

Mirror my emotions! Combining facial expression analysis and synthesis on a robot

Stefan Sosnowski, Christoph Mayer, Kolja Kühnlenz and Bernd Radig (Technische Universität München, Germany)

Reducing Speech Collisions by Using an Artificial Subtle Expression in a Decelerated Spoken Dialogue – Should communication robots respond quickly?

Kotaro Funakoshi, Kazuki Kobayashi, Mikio Nakano, Takanori Komatsu and Seiji Yamada (Honda Research Institute Japan Co. Ltd, Japan; Shinshu University, Japan; National Institute of Informatics / The Graduate University for Advanced Studies, Japan)

Evaluation of Robot Body Movements Supporting Communication

Helge Hüttenrauch, Cristian Bogdan, Anders Green, Kerstin Severinson Eklundh, Dominik Ertl, Jürgen Falb, Hermann Kaindl, Michael Göller (Royal Institute of Technology, Sweden; Vienna University of Technology, Austria; Research Center for Information Technology (FZI), Germany)

10:30-11:00 Coffee Break

11.00-11.25 Session: Design Perspectives (1 contributed paper, 15 min for presentation, followed by a 10 min discussion, chaired by Kerstin Dautenhahn)

On Making Robots Invisible-in-Use
Leila Takayama (Willow Garage, USA)

11.25-12.30 Keynote Talk (45 min talk plus 20 minutes discussion, chaired by Kerstin Dautenhahn)

Expressive robots and expressive interaction with robots: a design perspective
Patrizia Marti (University of Siena, Italy)

12:30-14:00 Lunch break and Keynote AISB Talk

14:00-15:30 Session: Design and Analysis of Human-Robot Interaction (4 contributed papers, 15 min each for presentation, followed by a 30 min discussion of all session papers, chaired by Karola Pitsch)

Social, functional, and problem-related tasks in HRI - a comparative analysis of body orientation and gaze
Manja Lohse (Bielefeld University, Germany)

Validating Characterizations of Sociality in HRI: The Case of Interaction Patterns

Peter H. Kahn, Jr., Brian T. Gill, Aimee L. Reichert, Takayuki Kanda, Hiroshi Ishiguro and Jolina H. Ruckert (University of Washington, USA; Seattle Pacific University, USA; ATR, Japan; Osaka University, Japan)

Development of Human-Robot Interaction Models by means of a Cognitive Walkthrough Approach

Astrid Weiss, Florian Foerster, Daniela Wurhofer and Manfred Tscheligi (University of Salzburg, Austria)

Exploratory Analysis of Operator:Robot ratio in Search and Rescue Missions

Alberto Valero, Chiara Saracini, Paloma de la Puente, Diego Rodriguez-Losada, Fernando Matia (Universidad Politecnica de Madrid, Spain; Universita di Roma, Italy)

15:30-16:00 Coffee Break

16:00-17:30 Session: RoboSkin - Artificial Skin for Humanoid Robots (4 contributed papers, 15 min each for presentation, followed by a 30 min discussion of all session papers, chaired by Joe Saunders)

Touch-Triggered Protective Reflexes for Safer Robots

Torbjørn S. Dahl and Andrew Palmer (University of Wales, UK)

Policy Adaptation through Tactile Correction

Brenna D. Argall, Eric L. Sauser and Aude G. Billard (Ecole Polytechnique Federale de Lausanne, Switzerland)

Towards Intrinsically Learned Skin Models in Robots

Simon McGregor and Daniel Polani (University of Hertfordshire, UK)

Towards a Skin-Like Embedded Tactile Sensor for Robotic Hands

Andrea Biggio, Perla Maiolino and Giorgio Cannata (University of Genova, Italy)

17:30 End of day 1 of symposium

Followed by Convention Dinner

Thursday 1st April 2010

9.00-10:30 Session: Cognition for robots in HRI (4 contributed papers, 15 min each for presentation, followed by a 30 min discussion of all session papers, chaired by Torbjørn S. Dahl)

Towards HRI on the Move with Mixed Initiative

Cristian Bogdan, Dominik Ertl, Michael Göller, Anders Green and Kerstin Severinson Eklundh (Royal Institute of Technology, Sweden; Vienna University of Technology, Austria; Research Center for Information Technology (FZI), Germany)

A Smart Action Selection Architecture Taking into account both Goal-orientedness and Proactivity

Woo Young Kwon and Il Hong Suh (Hanyang University, Korea)

An Autonomous Proxemic System for a Mobile Companion Robot

Mohammadreza Asghari Oskoei, Michael L. Walters and Kerstin Dautenhahn (University of Hertfordshire, UK)

Robot learning of lexical semantics from sensorimotor interaction and the unrestricted speech of human tutors

Joe Saunders, Chrystopher L. Nehaniv and Caroline Lyon (University of Hertfordshire, UK)

10:30-11:00 Coffee Break

11:00-11:25 Session: Attitudes and Relationships with Robots (1 contributed paper, 15 min for presentation, followed by a 10 min discussion, chaired by Joe Saunders)

Ibn Sina Steps Out: Exploring Arabic Attitudes Toward Humanoid Robots

Laurel D. Riek, Nikolaos Mavridis, Shammah Antali, Noura Darmaki, Zeeshan Ahmed, Maitha Al-Neyadi and Amina Alketheri (University of Cambridge, UK; United Arab Emirates University, UAE; University of Nancy, France)

11.25-12.30 Keynote Talk (45 min talk plus 20 minutes discussion, chaired by Kerstin Dautenhahn)

Is a Companion a distinctive kind of relationship with a machine?

Yorick Wilks (University of Sheffield, UK)

12:30-14:00 Lunch break and Keynote AISB Talk

14:00-15:30 Session: Robots for the young and old (3 contributed papers, 20 min each for presentation, followed by a 30 min discussion of all session papers, chaired by Leila Takayama)

A Robot as Persuasive Social Actor A Field Trial on Child-Robot Interaction

Astrid Weiss, Thomas Scherndl, Roland Buchner and Manfred Tscheligi (University of Salzburg, Austria)

How infants perceive the toy robot Pleo. An exploratory case study on infant-robot-interaction

Karola Pitsch and Benjamin Koch (Bielefeld University, Germany)

Ethical issues in robot care for the elderly: Dystopia or optimism?
Amanda Sharkey and Noel Sharkey (University of Sheffield, UK)

15:30-16:00 Coffee Break

16:00-17:00 Panel: How social do robots really need to be? (Panel members include Laurel Riek, Amanda Sharkey, Astrid Weiss, Karola Pitsch, Leila Takayama, Yorick Wilks, chaired by Kerstin Dautenhahn)

17:00-17:30 Final Discussion and conclusion (chaired by Kerstin Dautenhahn and Joe Saunders)

17:30 End of Symposium