Organizers

University of Amsterdam

TU/e Technische Universiteit Eindhoven University of Technology

University of Twente.

Sponsors

maxon motor driven by precision

Aldebaran Robotics

Metralabs mobile robots

Webots robot simulation

Publisher

Springer science+business media

Table of Contents

ICSR 2011 Conference

General Information

Paper Sessions

Conference @ a Glance

Conference Registration – Secretariat

The Conference Registration will take place at the Conference Secretariat, located in the library building ("Universiteitsbibliotheek" or building C) in front of the Conference Rooms, Doelen hall & Potgieter hall, ground floor.

The registration is open on
Wednesday, Novermber 23, 17:00-19:00 during the Welcome Drinks session
Thursday, November 24, 08:30

The conference registration fee includes:
+ Welcome Reception on 23 November
+ Lunch and coffee breaks on 24 and 25 November
+ Canal Cruise with Indonesian Ramah Tamah Banquet
+ One conference proceedings
+ One conference bag and souvenir

Cancellation Policy: Registration fee for any event is non-refundable

Conference Program

Wednesday
23 November 2011
+ Tutorial A: Joint Action for Social HRI in Room Porgieterzaal (Page 9)
+ Tutorial B: Analyzing HRI data in Room Vondelzaal (Page 9)
+ Welcome Reception

Thursday
24 November 2011
+ Keynote Talk 1: Dr. Tomotaka Takahashi (Page 7)
+ Paper Presentations Day 1 (Page 16 &17)
+ Works-in-Progress Presentations Day 1 (Page 20)
+ Boat Tour and Dinner (Page 13)

Friday
25 November 2011
+ Keynote Talk 2: Mr. Ken MacLeod (Page 8)
+ Paper Presentations Day 2 (Page 18 & 19)
+ Works-in-Progress Presentations Day 2 (Page 20)
+ Robotic Design Competition Winner Announcement
+ ICSR 2011 Panel Discussion & Best Paper Award Ceremony

Welcome Message

General Chairs

Vanessa Evers
ICSR 2011 General Chair
University of Twente, The Netherlands

Jaap Ham
ICSR 2011 General Chair
Eindhoven University of Technology, The Netherlands

Takayuki Kanda
ICSR 2011 General Chair
ATR IRC, Japan

Dear Colleague,

On behalf of the Organizing Committee, it is our greatest pleasure and honor to welcome you to the third International Conference on Social Robots (ICSR) at the University of Amsterdam, The Netherlands, from November 24 - 25, 2011.

In the new and rapidly growing and evolving research area of social robotics, building a community that is collegial, supportive, and constructive is crucial for fostering the scientific qualities needed to answer the questions that this strongly interdisciplinary field poses. The diversity of backgrounds and the sheer number of the Chairs involved in organizing this conference characterizes that enterprise. Likewise, the diversity of the papers in these proceedings and of the research discussed at the conference is an indication of the growing interest in social robotics research from a multitude of perspectives.
ICSR 2011 built strongly on the earlier ICSR conferences (Korea, 2009; Singapore, 2010), and was very much in debt to the huge efforts of the Standing Committee headed by Shuzhi Sam Ge. We thank all Organizing Chairs of ICSR 2011 for their tremendous efforts in making this conference a success; not only in its scientific output, but also in connecting researchers from all over the globe.

We hope you will find this conference a fulfilling experience, and hope you will enjoy cutting-edge science, many new contacts, and a pleasant stay in Amsterdam!

About ICSR 2011 & International Journal of Social Robotics

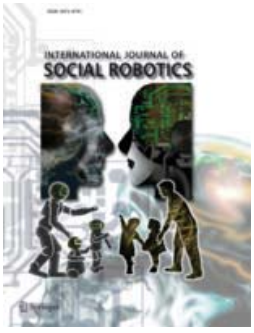
About ICSR 2011

The International Conference on Social Robotics brings researchers and practitioners together to report and discuss the latest progress in the field of social robotics. The conferences focus on the interaction between humans and robots and the integration of robots into our society. The inaugural conference was held in Incheon, Korea (2009), and after the very successful ICSR2010 in Singapore, we are proud to invite you to the intriguing city of Amsterdam, The Netherlands.

The theme of the 2011 conference is "Alive!" It expresses the vitality of the social robotics research, paying particular attention to the development of robots that appear increasingly social -- the point that people perceive them to be alive. The conference aims to foster discussion on the development of computational models, robotic embodiments, and behavior that enable robots to act socially and the impact that social robots have on people and their social and physical environment.

About the ICSR 2011 Mascot

AffRi (Affective Robot Interactions) aims to assimilate the social elements to be achieved in a social robotic platform. The "butterfly" and "heart" on AffRi remind and inspire us towards building the next generation of social robots with humanistic affections.



About International Journal of Social Robotics

This journal is a periodic publication which consolidates high impact contributions from researchers and developers in the field of social robotics, offering readers a holistic view of this emerging industry. Its purpose is manifold. On the one hand, it serves as a unified publication and guide from which students, engineers and researchers new to the field will be able to obtain a quick introduction and overview of the latest developments in all aspects of Social Robotics. On the other hand, it is a unified platform for established researchers to publish relevant work and where healthy discussions and information /result sharing can take place, to further spur the advancements of social robotics as a field. The potential market includes students (undergraduates and postgraduates), mechanical, electrical, and computer engineers/scientists, robo-ethicists, social scientists, university researchers, commercial companies (e.g. in the toy and entertainment industries), among many others. Prof. Shunzi Sam Ge serves as the Editor-in-Chief and Prof. Maja Matarić as the Co-Editor-in-Chief.

Organizing Committee

Standing Committee
Shuzhi Sam Ge
National University of Singapore/University of Electronic Science and Technology of China

Maja Mataric
University of South California, USA

Haizhou Li
A*Star, Singapore

Jong-Hwan Kim
KAIST, Korea

General Chairs
Vanessa Evers
University of Amsterdam, The Netherlands

Jaap Ham
Eindhoven University of Technology,
The Netherlands

Takayuki Kanda
ATR IRC, Japan

Publication Chairs
Dana Kulic
University of Waterloo, Canada

John-John Cabibihan
National University of Singapore, Singapore

Exhibition Chair
Astrid Weiss
University of Salzburg, Austria

Program Chairs
Christoph Bartneck
University of Canterbury, New Zealand

Bilge Mutlu
University of Wisconsin-Madison, USA

Finance Chair
Birna van Riemsdijk
TU Delft, The Netherlands

Tutorial Chairs
Martin Saerbeck
A*STAR, Singapore

See Swee Lan
A*STAR, Singapore

Website Chair
David van der Pol
Eindhoven University of Technology,
The Netherlands

Robot Design Competition Chairs
Adrian Tay Hwang Jian
A*STAR, Singapore

Henrik Scharfe
Aalborg University, Denmark

Raymond Cuijpers
Eindhoven University of Technology,
The Netherlands

Work-in-Progress Chairs
Ravindra De Silva
Toyohashi University of Technology, Japan

Dennis Reidsma
Twente University of Technology,
The Netherlands

International Advisory Board

International Program Committee

Selma Sabanovic
Indiana University, USA

Takanori Komatsu
Shinshu University, Japan

Bruce MacDonald
Auckland University, New Zealand

Kolja Kuehnlenz
Technical University of Munich, Germany

Michio Okada
Toyohashi University of Technology, Japan

Kai O. Arras
University of Freiburg, Germany

Sarah Perez-Kriz
University of Washington, USA

Aaron Steinfeld
CMU, USA

Manfred Tscheligi
University of Salzburg, Austria

Yuichiro Yoshikawa
Osaka University, Japan

Myung-Suk Kim
KAIST, Korea

Leila Takayama
Willow Garage, Inc., USA

Cindy Bethel
Yale University, USA

Dylan Glass
ATR, Japan

Christian Becker-Asano
University of Freiburg, Germany

Masayuki Kanbara
NAIST, Japan

Tony Belpaeme
University of Plymouth, UK

XiaoQi Chen
University of Canterbury, New Zealand

Adriana Tapus
ENSTA, France

Miguel A. Salichs
Carlos III University, Spain

Yeow Kee Tan
A*Star, Singapore

Keynote Talk 1

Thursday, 24 November 2011, 09:30 - 10:30
Room: Doelenzaal

Creative Robot Design

Tomotaka Takahashi
Robot Creator, Founder and CEO, Robo Garage
Japan

ABSTRACT
Since our lifestyle is changing drastically, meaning of the future robot is changing. We used to expect humanoids to do some physical tasks. But now, we realize the biggest role for a humanoid is to be a man-machine interface in smart house. Well designed human shapes, human motions, and human like communications are necessary for communication, because we need sympathy to treat them like human beings. In 15years, compact humanoids will be in your house or your pocket, your lifestyle and preference information are gathered through the daily communication to control all the other machines and services. I have been developing robot because we need to show actual robot prototypes. In my lecture with robots demo, I would like you to share new image of the future life.

BIOGRAPHICAL SKETCH
Founder and CEO of Robo Garage, research associated professor of The University of Tokyo, visiting professor of Fukuyama University and Osaka Electro-Communication University.

Solely research, develop, design, and manufacture humanoid robots from scratch. Master pieces are Ropid, Chroino, FT, Evolta, Tachikoma, and Vision.

Awards; TIME magazine ‘Coolest Inventions 2004’, Popular Science magazine ‘33 persons changing the future’, Guinness world record of long distance remote controlled robot car, and Robo-cup world champion 2004-2008.

Keynote Talk 2

Friday, 25 November 2011, 16:00 - 17:00
Room: Doelenzaal

Souls in Steel and Silicon: How SF has Imagined AI

Ken MacLeod
Science Fiction Writer

ABSTRACT

The history of imagining, and attempting to create, automata that emulate aspects of human behaviour extends from classical antiquity to the present, with ever-increasing but still limited success. With the emergence of the concept of the robot in science fiction in Čapek's R.U.R. (1920) these imaginings have taken a vivid popular form. The robot appears to replicate capacities that in their full development have been taken as distinctive to what make us human: labour, language, conscious self-awareness. It raises issues that have been central to human history: slavery, freedom, employment, and rights. Interestingly, as robotics has moved from science fiction to practical engineering, the robot has virtually ceased to feature in written SF as a vehicle for exploring these concerns. It has largely been replaced as a serious topic and trope by artificial intelligence. Artificial intelligence raises related issues at a more abstract level, most significantly those of consciousness, embodiment, emotion, and (through the possibility of immersive virtual reality) epistemology and scepticism. In written SF from Karel Čapek through Isaac Asimov, Philip K. Dick, and William Gibson, and in films and television series such as Terminator, The Matrix, and Battlestar Galactica, the issues raised by both robots and AI have been explored with varying degrees of awareness and sophistication but with enormous influence and popular appeal. The important questions to discuss are not the accuracy or otherwise of these depictions, but what they tell us about our own anxieties over our human capacities, and what effects they may have on practical robotics and AI research and on public perceptions of and reactions to these fields. Finally, the consequences of a change in human self-understanding arising from cognitive science and its apparent implication that humans are themselves robots (albeit built from organic materials, without conscious design, by natural selection) deserve careful and critical attention.

BIOGRAPHICAL SKETCH

Ken MacLeod was born in Stornoway, Isle of Lewis, Scotland, on August 2, 1954. He is married with two grown-up children and lives in West Lothian. He has an Honours degree in Zoology and a Masters degree for research in biomechanics. While completing the latter he trained as a programmer, and worked for over ten years in the IT industry. Since 1997 he has been a full-time writer, and in 2009 was Writer in Residence at the ESRC Genomics Policy and Research Forum at Edinburgh University. He is the author of thirteen novels, from The Star Fraction (1995) to Intrusion (forthcoming, 2012), three novellas, and many articles and short stories. These works have ranged from near-future political and technological speculation in the categories of post-cyberpunk, techno-thriller and satire to wide-scale 'New Space Opera'. His novels and stories have received three BSFA awards and three Prometheus Awards, and several have been short-listed for the Clarke and Hugo Awards. He has been an invited speaker at a wide range of academic, cultural, business and political events, and a guest of honour at several science fiction conventions.

In his science fiction MacLeod has looked at questions of artificial intelligence and human and machine consciousness from many different angles, exploring scenarios ranging from implacable conflict through pragmatic coexistence to joyous transcendence. In his critical writing and personal comments he has been generally sceptical of the prospects of imminent, world-changing advance in AI and related fields, and of predictions of 'the Singularity', which he regards as a secular version of millenarian and apocalyptic thought – 'the Rapture for nerds', as one of his characters puts it. He remains deeply interested in what our speculations on machine consciousness tell us about our own.

Ken MacLeod's blog is The Early Days of a Better Nation

http://kenmacleod.blogspot.com

His twitter feed is @amendlocke

Tutorials

Thursday, 24 November

Chairs

Martin Saerbeck
Institute of High Performance Computing

Swee Lan See
Institute for Infocomm Research

TUTORIAL A

Joint Action for Sodcial Robotics: How to Build a Robot that Works Together with Several Humans

Venue: Potgieterzaal Room
Time: 9:30 - 17:00

Authors:
Manuel Giuliani, Ron Petrick, Kerstin Huth, Amy Isard, Maria Pateraki, Panos Trahanias

SYNOPSIS

Joint action, the coordination of individual actions by two or more participants working on a common goal, is the basis of many everyday social interactions between humans. However, even though humans engage in such activities, seemingly with ease, how well are the mechanisms underlying such behaviours understood? Can we build a robot that is able to work together with humans? The aim of this tutorial is to give an introduction to several key technologies that are needed to build a human-robot joint action system. In particular, we explore the topic of joint action from the viewpoint of different research fields including robotics, computer science, electrical engineering, computational linguistics, and psycholinguistics all of which we believe contribute to our understanding of joint action. This tutorial will give a technical introduction to the software, tools, and methods that we are using to construct a robot capable of working with humans, in the context of JAMES, a European project exploring human-robot joint action and social interaction. The talks in this tutorial will cover a variety of topics at the heart of joint action, including the collection and analysis of empirical data from human-human joint action studies, the requirement analysis and implementation of a robot capable of joint action with a human, algorithms for visual processing of human head pose and gestures, grammar-based speech processing and output generation, and knowledge-level planning with incomplete information. Since the implementation of a human-robot joint action system involves techniques from many diverse research areas, researchers also face the challenge of working together on common goals. Thus, in addition to the technical programme we will also share information concerning best practices for communication in a multi-disciplinary research team.

List of topics:
Attendees of this tutorial will receive
- a better understanding of the importance of joint action in the area of social robotics,
- an empirically motivated overview of the basic mechanisms of human-human joint action,
- an overview of several technologies that are needed to build a human-robot joint action system, and
- best practices for communication and collaboration in an international, multi-disciplinary research team

TUTORIAL B

Analyzing HRI Data

Venue: Vondelzaal Room
Time: 10:00 - 17:00

Authors:
Manja Lohse, Sebastian Gieselmann, Sascha Griffiths, Katrin Lohan, Ingo Lütkebohle, Karola Pitsch, Nina Riether, Lars Schillingmann, Frederic Siepman

SYNOPSIS

An increasing number of researchers in human-robot interaction (HRI) conduct user studies and experiments in order to evaluate their systems and to generate findings about the users and the interaction. These studies are highly interdisciplinary endeavours since they include both technical and social aspects of interaction. At RO-MAN 2009 we organized a first tutorial (see http://aiweb.techfak.unibielefeld.de/content/tutorial-roman09) on evaluation in HRI in which we showed how we cope with the plenitude of data acquired in user studies in our daily work. The tutorial at ICSR 2011 will be based on the same assumptions but is going to focus on a new aspect that evolved within the last two years: how can data from the user and the system be more strongly integrated with each other in the analysis?

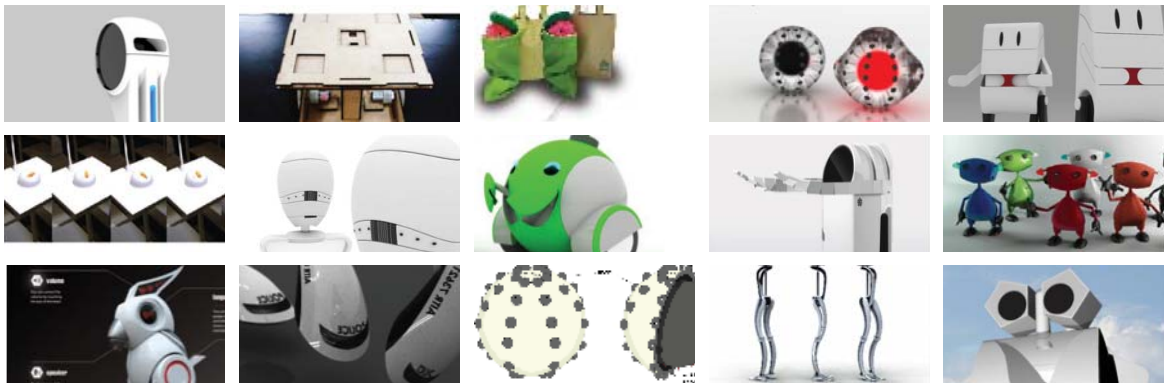
We will discuss how to acquire reliable data about the system itself and about the user. Connected to this issue, we will talk about the tools and approaches that we use for logging and synchronization of the data. Moreover, we will give a short introduction on qualitative and quantitative methods. Case studies will show how data were acquired and analyzed in user studies at Bielefeld University, with the aim to generate useful insights for system design and social science at the same time and in an integrated manner.

List of topics:
- essentials of designing user studies and experiments
- introduction on how to acquire data in user studies
- preparation of data for analysis
- qualitative and quantitative analysis of data
- linking different types of data for analysis and visualization
- tools and devices for data acquisition and synchronization

Robot Design Competition & Results

Friday, 25 November 2011, 14:45 - 15:45
Room: Doelenzaal

Top 15 entries are displayed at the conference venue



In the inaugural ICSR 2010 Robotic Design Competition, we received over 54 designs from America, Europe and Asia regions. The entries received were all innovative ideas that demonstrated the creative use of technologies, intelligence, interactivity, adaptability that are capable of impacting or improving human tasks and well-being. The ICSR 2011 Robotic Design Competition robotic aims to challenge its participants to submit designs of robotic platforms that are capable of improving human daily task and well being. Their innovation will shape how people interact with robots when robots are expected to be companion in our daily interaction (not limited to healthcare, service, entertainment, home, transport, sports and education).

The 3 winning entries selected by the Jury will receive cash prize awards:
First Prize: USD 1,000
Second Prize: USD 500
Third Prize: USD 200

The winner of the ICSR 2011 Robotic Design Competition will be announced on 25 November 2011, 15.15-15.45, at Room Doelenzaal.

All the entries were systematically and dutifully judged by the organizing committee of ICSR 2010 and the following distinguish judges whose research interest is related to social robotics:

Dr. Tomotaka Takahashi
Robot Designer and Professor

Mr. Ken MacLeod
Science Fiction Writer

Prof. Dr. Gordon Cheng
Professor and Chair of Cognitive Systems, Founder and Director of the Institute for Cognitive Systems (ICS), Faculty of Electrical Engineering and Information Technology, Technical University Munich (TUM), Munich.

Design Competition Delegate's Choice
Take part in the ICSR 2011 Robotic Design by voting your favorite among the top design entries. Conference delegates are encouraged to drop their vote at Room Potgieterzaal. In this same room, posters describing the design entries will also be displayed during Friday November 25th.

Voting will close on 25 November 2011 at 14:15 (right after lunch), voting forms are available at Room Potgieterzaal, where you will also find the voting box.

ICSR 2011
Panel Discussion

Friday, 25 November 2011, 14:15 - 14:45
Room: Doelenzaal

Multi-Lingual and Cross-Cultural Social Robots

A premise is that robots can potentially outperform many humans for a very simple and specific function, as in pointing the user in the right direction, if the robot can accomplish this specific task in a multi-lingual cross-cultural fashion. If this is true and the application domains are numerous then the impact can be significant. The purpose of this panel is to discuss multi-lingual cross-cultural HRI from three perspectives: linguistic, robotic and social.

The panel discussion will be chaired by:

Dr. Majd F. Sakr
CMU Qatar

The panel in the ICSR 2011 Panel Discussion include the following renowned researchers:

Dr. Sandiway Fong
University of Arizona

Dr. Astrid Weiss
University of Salzburg, Austria

Dr. Christoph Bartneck,
University of Canterbury,
New Zealand

Conference Venue :

THE LIBRARY OF THE UNIVERSITY OF AMSTERDAM

Address:
Singel 425, Amsterdam

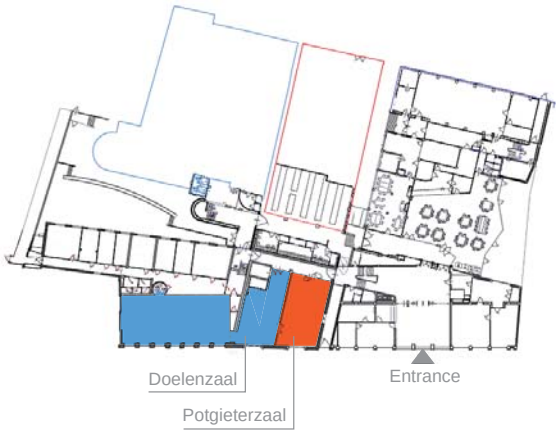
Nearby Map of Conference Venue Google Maps

Conference contact:
If you need our assistance, please contact:

Conference secretary:
Charlotte Bijron
c.g.bijron@utwente.nl
mobile phone number: +31 6 455 34 279

General co-chair:
Jaap Ham
j.r.c.ham@tue.nl
mobile phone number: +31 6 51 080 128

Floor Plan



The Library of the University of Amsterdam comprises all libraries of the university, including those of the Academic Medical Centre and of the Academic Centre for Dentistry Amsterdam. The libraries share a common goal, work in close collaboration and complement each other. Via the network the library gives access to electronic information and via the individual libraries to information in print. The library's mission and its aim to achieve cohesion and cooperation are expressed in its Mission Statement.

New services are mostly developed in project form. The library of the University also works in close cooperation with other scholarly libraries and organizations concerned with the provision of scholarly information, both nationally and internationally.

The library was founded in 1578, when the books and manuscripts of Roman Catholic institutions, which had been confiscated by the municipal authorities, were amalgamated to form a Municipal Library.

The Society of Friends of the University Library advances public interest in the library and offers financial support in acquiring special editions.

ARCHITECTURE OF THE UNIVERSITY LIBRARY
The complex of buildings housing the University Library has three very different façades on Singel. The entrance, Singel 425, is a modern building from the sixties (architect: ir J. Leupen). The façade and the building behind it were built on a plot that had been vacant since 1939. Until then there had been a Roman Catholic church, the St. Catharina church, and before then, until 1816, the 15th-century premises of the Voetboog- or St Jorisdoelen (Foot or St George Archers). The façade of Singel 423 is the beautifully restored front of the Town Armoury. Here artillery was kept, as well as all light and heavy hand weapons; on the Singel side it had two large doors, in order to be able to bring the canons quickly to the town ramparts in times of need. The large building was later used for various purposes: as the premises of the Militia, as Royal Stables, and as temporary meeting hall for the Town Council. The third façade, Singel 421, is a sobre, 18th-century façade, crowned by a cornice. Its only special characteristic is the large coat of arms of Amsterdam with the five smaller ones underneath. The city arms were put in in 1723, when the façade was given its present exterior. At that time the building housed a famous hostel for archers, the Garnalendoelen. The smaller arms are those of the four governors of the Longbow Archers in 1651, and in the middle are the arms of the Longbow Archers Guild.

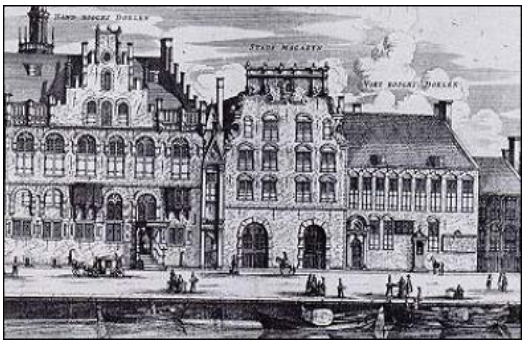
This building is actually much older than its neighbours. The owners of the hostel had thoroughly rebuilt the interior of the Longbow Archers' premises and extended the building with several rooms and halls. Large parts of the building, which dates from about 1517, were kept untouched, however, underneath the new plasterwork and panelling. During the restoration for the library in 1968, various parts of the old building reappeared. The large hall on the first floor still had its original beams in the ceiling; in the walls were the remains of gothic windows and of a large mantelpiece, which could then be reconstructed. On the ground floor a large piece of brickwork with projecting arches appeared, which turned out to be the remains of a medieval façade.

It is a strange thought that possibly the oldest brickwork of Amsterdam and the only late medieval mantelpiece in Amsterdam are to be found in this part of the University Library. Thus the memory of the first users of the building, the archers of the St Sebastian guild, has not been totally extinguished.

Thanks to the fact that the University Library was housed at Singel, the buildings of the Archers were kept and restored. The new façade from the sixties, however, has never been popular. It was, and still is, felt to be a false tooth in an otherwise perfect set of teeth, an example of coffee machine architecture...

Breaks: Coffee, tea and lunch will be provided in the room between the two conference rooms (Doelenzaal and Potgieterzaal).

Conference Activities



Registration

Registration desks are located at the Conference Secretariat, located in the library building ("Universiteitsbibliotheek" or building C) in front of the Conference Rooms, Doelen hall & Potgieter hall, ground floor.. The registration is opened on:

Wednesday, November 23, 17:00-19:00 (during the Welcome Drinks session)
Thursday, November 24, 08:30

Welcome Reception

The ICSR 2010 Welcome Reception will be held in the room between the two conference rooms (Doelenzaal and Potgieterzaal).

Wednesday, November 23, 17:00-19:00

Conference Dinner Banquet and Canal Cruise

Thursday, 24 November 2011, 19:00-22:00

Canal Cruise with Indonesian Ramah Tamah Banquet: a subtle blend of exotic dishes, each one focused on authentic ity, presentation and quality.

Gliding through the Amsterdam canals at night is, in itself, an unforgettable experience. Add dining in style as you soak up the atmosphere and the picture's complete!

The canal cruise boat will leave from the jetty at Vijff Vlieghen, Singel. The NH City Centre Hotel is one minute' walk away from the jetty.

The jetty from which the boat will leave is indicated on the map at B. This jetty is located at Singel 359, right across from restaurant "Vijff Vlieghen". The university library, at which our conference takes place, is located at A. Walking distance is about 240 meters. The boats will leave at 19.00h and return at approximately 21.30h.

Information for Paper Sessions

Chair/Co-Chair

All Chairpersons and Presenters are requested to be in their respective session rooms at least 15 minutes prior to the commencement of each session.

Presenters are advised to copy their presentation file into the ICSR2011 notebook located at each respective conference room.

Paper Presentations

Presenters of the oral paper presentation should approach your Session Chair 10 minutes before your session. Take note that Sessions Chairs will be taking attendance. It is recommended that you copy your files to the laptop in the presentation room to reduce the transition time between speakers. If time permits, please also test any presentation equipment you might need during your presentation.

Presentation Time:

Papers are allocated approximately 15 minutes for presentation including 2-3 minutes for questions and answers. To meet the allocated time, it is recommended that you allocate about 2 minutes per slide when discussing equations or introducing novel concepts, and one minute per slide when the content is more self explanatory. For the benefit of your audience, do keep your slides simple and easy to read. Please try not to make too many points per slide. We appreciate your cooperation is crucial in keeping the program on schedule.

Equipment Provided:

All presentation rooms will be equipped with a Windows laptop, a projector, a microphone and a pointing device.

Please ensure that your slides are stored in a format that can be displayed by either software. It is recommended that you carry your presentation slides on a USB flash drive.

If any other audio or video equipment is required, please contact the conference secretariat to indicate your request; please be advised that additional costs may be incurred.

Please take extra care in handling the following issues that could typically cause technical problems:

+ Displaying on Windows slides created on a Mac/Linux platform
+ Playback of AV content
+ Special fonts, e.g., math or special language that are used in the presentation

Program Overview

Wednesday, 23 November 2011

	Track A (Potgieter Room)	Track B (Vondel Room)
09:30 - 10:00	**Tutorial A: Joint Action for Social HRI**	
10:00 - 10:15		**Tutorial B: Analyzing HRI Data**
10:15 - 10:30	Tea Break	
10:30 - 12:00	**Tutorial A continued**	**Tutorial B continued**
12:00 - 14:00	Lunch	
14:00 - 15:45	**Tutorial A continued**	**Tutorial B continued**
15:45 - 16:00	Tea Break	
16:00 - 17:00	**Tutorial A continued**	**Tutorial B continued**
17:00 - 19:00	Welcome Drinks and Registration	

Thursday, 24 November 2011

08:30 - 09:30	Registration
09:30 - 09:45	Welcome
09:45 - 10:45	**Keynote Talk 1 - Dr. Tomotaka Takahashi**
10:45 - 11:00	Tea Break
11:00 - 12:00	**Paper Session 1 - Social Interaction with Robots**
12:00 - 12:30	**WIP Talks**
12:30 - 14:30	Lunch
14:30 - 16:15	**Paper Session 2 - Nonverbal Interaction with Social Robots**
16:15 - 16:30	Tea Break
16:30 - 17:30	**Paper Session 3 - Robots in Society**
19:00 - 22:00	Boat Tour and Dinner

Friday, 25 November 2011

09:30 - 10:30	**Paper Session 4 - Affective Interaction with Social Robots**
10:30 - 10:45	Tea Break
10:45 - 11:45	**Paper Session 5 - Robots in the Home**
11:45 - 12:15	**WIP Talks**
12:15 - 14:15	Lunch
14:15 - 15:15	**Panel Discussion**
15:15 - 15:45	**Design Competition Presentations**
15:45 - 16:00	Tea Break
16:00 - 17:00	**Keynote Talk 2 - Mr. Ken MacLeod**
17:00 - 17:15	Goodbye

Paper Session 1

Thursday, 24 November 2011, 11:00 - 12:00

Room: Doelenzaal

Social Interaction with Robots

Interaction Scenarios for HRI in Public Space
Jakub Zlotowski, Astrid Weiss, and Manfred Tscheligi

MAWARI: A Social Interface to Reduce the Workload of the Conversation
Yuta Yoshiike, P. Ravindra S. De Silva, and Michio Okada

Initial Formation of Trust: Designing an Interaction with Geminoid-DK to Promote a Positive Attitude for Cooperation
Elizabeth G. Dougherty and Henrik Scharfe

Minimal Group – Maximal Effect? Evaluation and Anthropomorphization of the Humanoid Robot NAO
Dieta Kuchenbrandt, Friederike Eyssel, Simon Bobinger, and Maria Neufeld

Paper Session 2

Thursday, 24 November 2011, 14:30 - 17:30

Room: Doelenzaal

Nonverbal Interaction with Social Robots

Paper Session 3

Thursday, 24 November 2011, 16:30 - 17:30

Room: Doelenzaal

Robots in Society

Homewrecker 2.0: An Exploration of Liability for Heart Balm Torts Involving AI Humanoid Consorts
Sonya Ziaja

Examining the Frankenstein Syndrome: An Open-Ended Cross-Cultural Survey
Dag Sverre Syrdal, Tatsuya Nomura, Hiroto Hirai, and Kerstin Dautenhahn

Evaluating Supportive and Instructive Robot Roles in Human-Robot Interaction
Manuel Giuliani and Alois Knoll

Requirements and Platforms for Social Agents that Alarm and Support Elderly Living Alone
Marleen Spiekman, Pascal Haazebroek, and Mark Neerincx

Paper Session 4

Friday, 25 November 2011, 09:30 - 10:30

Room: Doelenzaal

Social Robots in Education

The Effects of a Robot Instructor's Positive vs. Negative Feedbacks on Attraction and Acceptance towards the Robot in Classroom
Eunil Park, Ki Joon Kim, and Angel P. del Pobil

Attitude towards Robots Depends on Interaction But Not on Anticipatory Behaviour
Raymond H. Cuijpers, Maarten T. Bruna, Jaap R.C. Ham, and Elena Torta

Listening to Sad Music While Seeing a Happy Robot Face
Jiaming Zhang and Amanda J.C. Sharkey

Motivating Children to Learn Arithmetic with an Adaptive Robot Game
Joris B. Janssen, Chrissy C. van der Wal, Mark A. Neerincx, and Rosemarijn Looije

Paper Session 5

Friday, 25 November 2011, 10:45 - 11:45

Room: Doelenzaal

Affective Interaction with Social Robots

Engkey: Tele-Education Robot
Sangseok Yun, Jongju Shin, Daijin Kim, Chang Gu Kim, Munsang Kim, and Mun-Taek Choi

Analysis of Bluffing Behavior in Human-Humanoid Poker Game
Min-Gyu Kim and Kenji Suzuki

People's Perception of Domestic Service Robots: Same Household, Same Opinion?
Julia Fink, Valérie Bauwens, Omar Mubin, Frédéric Kaplan, and Pierre Dillenbourg

RoboCup@Home: Adaptive Benchmarking of Robot Bodies and Minds
Tijn Van der Zant and Luca Iocchi

Work-in-Progress Presentations

Thursday, 24 November 2011, 12:00 - 12:30

Friday, 25 November 2011, 11:45 - 12:15

Chairs

Ravindra De Silva
Toyohashi University of Technology, Japan

Dennis Reidsma
University of Twente, The Netherlands

The “Works-In-Progress” track welcomed research contributions in early stages of development. The four-page contributions will be made available to the attendees of the conference in a work-in-progress proceedings, but will not be archived, thus, allowing authors to maintain the copyright of their work until full publication. The WIP presentations will consist of brief talks and poster presentations, allowing fruitful discussion and community building.

On each of the two days of the conference, work-in-progress submissions will be presented in a short verbal presentation and a poster presentation. During the short (verbal) presentation session, each work-in-progress authors will give a one minute presentation to summarize the highlights of their work. These presentations will take place in room Doelenzaal. Next, during the lunch, more in-depth information about these papers will be presented through posters. Posters will be displayed in room Potgieterzaal.

Thursday, November 24:
One-minute presentations: 12:00-12:30, room Doelenzaal
Poster presentations: 12:30-14:30, room Potgieterzaal

Friday, November 25:
One-minute presentations: 11:45-12:15, room Doelenzaal
Poster presentations: 12:15-14:15, room Potgieterzaal

Specific Instructions to Work-In-Progress Authors

Your presentation of your work at the Works-in-Progress track consists of two parts: a poster, and a one minute long presentation in which you promote your poster.

Your Presentation

You will pitch your work in one minute, using only one slide, during a "poster madness" session right before the lunch. The goal of this presentation is to invite people to come visit your poster.

In preparation to the conference, every author was asked to send us two slides: one with the title and the authors of the paper, and one single slide summarizing the highlights of their work.

At the start of the "poster madness" session, the WiP authors will assemble in the room Doelenzaal. We will introduce the session, and then quickly call the authors one by one onto the stage to pitch their work. Make sure that you are there at the start of your session!

Your Poster

You will bring to the conference a poster describing your work. During the lunch, people can visit your poster and discuss your work with you. The size of this poster is A1. Poster boards will be provided by us; please put up your poster no later than the tea break in the morning session (in the morning before the first talk would be even better). Posters will be displayed in the room Potgieterzaal.

Exhibitors

Aldebaran

NAO is a humanoid robot that is 58cm tall and weighs 5kg developed by ALDEBARAN Robotics. NAO is an autonomous and interactive robot that is completely programmable. NAO is used today for research and education around the world in prestigious universities and research institutes in the field of AI, human-machine interaction, vision, home assistance and interaction with autistic children. Meet NAO during ISCR and discover its huge interactions capacities.

Free University Brussels - Probo

Probo is a social robot that is developed at the Vrije Universiteit Brussel as research platform to study cognitive human-robot interaction (cHRI) with a special focus on children. The robot Probo is designed to act as a social interface, providing a natural interaction while employing human-like social cues and communication modalities. The robot has a fully actuated head, with 20 degrees of freedom, capable of showing facial expressions and emotions. To guarantee safety the robot is powered by compliant actuators which gives together with the soft jacket its huggable and soft character. The robot is currently used for Robot Assisted Therapies (RAT) with autistic children. More information can be found on the website: probo.vub.ac.be.

MetraLabs

Presentation of their new mobile interactive robot platform SCITOS G3:
- autonomous navigation and obstacle avoidance
- Graphical user interface
- Evaluation results within the FP7 project CompanionAble

More information can be found on http://www.metralabs.com/

Cyberbotics Ltd.

Simulation tools are widely used by robotics researchers to make scientific experiments and design robotics systems that interact with their environment. The Webots software, developed by Cyberbotics Ltd. is used by over 850 universities and corporate research centers worldwide for that purpose. Theexhibition booth will demonstrate the capabilities of the Webots software to model the interactions between a mobile robot and a typical human environment, through its simulated sensors and actuators. More information about the Webots software is available from the website: http://www.cyberbotics.com.

Sponsors

maxon motor
driven by precision

ALDEBARAN Robotics

METRA MetraLabs mobile robots

Webots™
robot simulation