

The Second International Conference on Human-Robot Interaction

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■ The second international conference on Human-Robot Interaction (HRI-2007) was held in Arlington, Virginia, March 9–11, 2007. The theme of the conference was “Robot as Team Member” and included posters and paper presentations on teamwork, social robotics, adaptation, observation and metrics, attention, user experience, and field testing. One hundred seventy-five researchers and practitioners attended the conference, and many more contributed to the conference as authors or reviewers. HRI-2008 will be held in Amsterdam, The Netherlands from March 12–15, 2008.

The second international conference on Human-Robot Interaction (HRI-2007) was held March 9–11, 2007, in Arlington, Virginia. The conference was jointly sponsored by the Association for Computing Machinery (ACM) through SIGCHI and SIGART, and by the IEEE Robotics and Automation Society. The conference was organized in cooperation with AAI and with the Human Factors and Ergonomics Society.

The field of HRI has grown dramatically in recent years. Spurred by advances in robotics technologies and communications, many researchers are studying how to use these

advances to solve critical challenges in socially relevant problems. These efforts are inherently interdisciplinary, requiring input from engineering, computer science, psychology, cognitive science, linguistics, and human factors.

HRI-2007 was the second step toward becoming a premier interdisciplinary forum for the presentation of research results on leading-edge issues of human-robot interaction and collaboration. The three goals of the conference series are to promote the inherently interdisciplinary field of HRI, to provide a single-track forum for the dissemination of excellent research, and to provide high-quality evaluations of mature and emerging research.

The call for papers attracted 101 submissions from Asia, Europe, Canada, and the United States. Twenty-two submissions were accepted for oral presentation, and 26 submissions were accepted for poster presentation. Additionally, a video session included 13 presentations (selected from 25 submissions) from 13 researchers and practitioners. Topics of the video session included teamwork, social robotics, adaptation, observation and metrics, attention, user experience, and field testing.

We were delighted to have Richard Hackman (Harvard University, USA) and Hiroshi Ishiguro (Osaka University, Japan) give thought-provoking plenary presentations. Hackman delivered a talk entitled “Humans, Robots, and Teams” that leveraged work in human teams to identify issues that arise when humans and robots act in teams. Ishiguro delivered a talk that explored the state-of-the-art in humanoid robots, with an eye toward understanding the “uncanny valley” in peer-to-peer HRI.

The conference’s outstanding paper award went to “Humanoid Robots as a Passive-Social Medium: A Field Experiment at a Train Station” by Kotaro Hayashi, Daisuke Sakamoto, Takayuki Kanda, Masahiro Shiomi, Satoshi Koizumi, Hiroshi Ishiguro, Tsukasa Ogasawara, and Norihiro Hagita. The best student paper award went to Guy Hoffman and Cynthia Breazeal for their paper, titled “Effects of Anticipatory Action on Human-Robot Teamwork: Efficiency, Fluency, and Perception of Team.”

The best poster award went to Emma Sviestins, Noriaki Mitsunaga, Takayuki Kanda, Hiroshi Ishiguro, and Norihiro Hagita for their paper, titled “Speed Adaptation for a Robot Walking with a Human.”

The quality of reviews for this year’s conference was very high. To recognize the efforts of especially good reviewers and to promote high-quality reviews in future HRI conferences, an award was created for those reviewers who did multiple reviews and submitted them on time, who were highly rated by other reviewers, and who were highly rated by authors even though many of the reviews did not recommend acceptance. For HRI-2007, the best reviewers award went to Susan Fussell and Dennis Perzanowski, and the best student reviewer award went to Ian Fasel.

The conference was attended by about 175 representatives from academe, government, and industry. Feedback from the attendees was overwhelmingly positive, and substantial momentum has been built for HRI-2008, which will be held in Amsterdam, The Netherlands, March 12–15, 2008.



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Important Dates

Paper Submission: Nov. 19, 2007
 Author Notification: Jan. 21, 2008
 Camera-Ready Copy: Feb. 21, 2008

The 21st International FLAIRS Conference

Grand Bay Miami Hotel
 Coconut Grove – Miami, Florida
May 15-17, 2008

The 21st International FLAIRS Conference (FLAIRS-21) will be held May 15 - 17, 2008 at the Grand Bay Miami Hotel in the village of Coconut Grove, Miami, Florida, USA. The conference hotel is on the waterfront of Biscayne Bay close to downtown Miami and South Beach. FLAIRS-21 will feature technical papers, special tracks, and invited speakers on artificial intelligence. The conference is hosted by the Florida Artificial Intelligence Research Society, in cooperation with AAAI.

Topics of interest are in all areas of artificial intelligence, including:

- *Foundations:* Knowledge representation, Cognitive modeling, Perception, Reasoning & programming, Search, Learning;
- *Architectures:* Agents and distributed AI, Intelligent user interfaces, Natural language systems Information retrieval, Robotics;
- *Applications:* Aviation and aerospace, Education, Entertainment, Medicine, Management and manufacturing, World Wide Web;
- *Implications:* Philosophical underpinnings, Social impact and ethics, Evaluation of AI systems, Teaching AI.

In addition to the general conference, FLAIRS offers numerous special conference tracks. Special tracks provide researchers in focused areas the opportunity to meet and present their work. Please consult the conference web site for details.

<http://www.flairs-21.info/>

In cooperation with the Association for the Advancement of Artificial Intelligence



Alan C. Schultz is director of the Navy Center for Applied Research in Artificial Intelligence at the Naval Research Laboratory (NRL) in Washington, D.C. He has 21 years experience and more than 90 publica-

tions in robotics, human-robot interaction, and machine learning, and he is responsible for establishing and running the Autonomous Systems Laboratory at NRL. Schultz was selected to teach at the first IEEE/RAS Summer School on Human-Robot Interaction and has chaired many conferences and workshops in robotics and human-robot interaction. He served as chair of the AAAI Mobile Robot Competition and Exhibit in 1999 and 2000.



Cynthia Breazeal is an associate professor of Media Arts and Sciences at the MIT Media Lab. She is the founder and director of the Robotic Life Group and holds the LG Group Career Development chair. She is a

pioneer of human-robot interaction (HRI) and social robotics. She has received numerous honors and awards including a Technology Review TR35 award for prominent young innovators, an ONR Young Investigator Award, and a National Design Awards finalist in communications design. Her current research focuses on the area of human-robot relations to create sophisticated anthropomorphic robots with rich nonverbal communication and perspective-taking skills that enable them to fluently work and learn in collaboration with people as capable partners. She received her S.M (1993) and Sc.D. (2000) in electrical engineering and computer science from the Massachusetts Institute of Technology.



Terry Fong is the director of the Intelligent Robotics Group at the NASA Ames Research Center. Prior to this, Fong was the deputy leader of the Virtual Reality and Active Interfaces Group at the Swiss Federal Institute of Technology, Lausanne. From 1997 to 2000, he was vice president of development for Fourth Planet, Inc., a

developer of real-time visualization software. Fong has published more than forty papers in field robotics, human-robot interaction, virtual reality user interfaces, and parallel processing, was chair of the 2006 AAAI Spring Symposium on human-robot interaction in space, and is general program cochair for HRI-2008.



Sara Kiesler is Hillman Professor of Computer Science and Human Computer Interaction at Carnegie Mellon University. Kiesler applies behavioral and social science to technology design and to under-

standing how technology changes individuals, groups, and organizations. She conducted among the first scientific studies of computer-mediated communication, authored hundreds of articles, and edited or authored eight books including *Distributed Work* (MIT Press) and *Computers, Phones, and the Internet* (Oxford). She has directed the People and Robots Laboratory at Carnegie Mellon for six years, leading research into cognitive, social, and design aspects of human-robot interaction.