

**The 2009 International Symposium on Collaborative Technologies and Systems
(CTS 2009)**

May 18-22, 2009

**The Westin Baltimore Washington International Airport Hotel
Baltimore, Maryland, USA**

CALL FOR PAPERS

**Special Session on Collaborative Robots and Human Robot
Interaction**

Submission Deadline: January 15, 2009

BRIEF DESCRIPTION:

The presence of robotic technologies (from small unmanned ground sensors to multi-ton unmanned vehicles) and concurrent existence of research and development programs is growing in many field applications, in both military and civilian operational environments. In the near future, we anticipate that robots will be increasingly employed collaboratively to achieve common goals. The interaction among collaborative robots as well as between robots and their human operators is critical to the successful employment of robots, and, therefore, needs careful examination.

This special session on collaborative robots - to be held as part of the 2009 International Symposium on Collaborative Technologies and Systems, May 18-22, 2009, at the Westin Baltimore Washington International Airport Hotel, Baltimore, Maryland, USA - will focus on the areas of collaborative robotic technologies (including unmanned aerial, sea and ground vehicles) and human-robot-interaction. We invite original contributions from researchers in academia, research laboratories, and the computer industry on these emerging and important areas of information technology. Our goals are to provide a dedicated session that fosters closer interaction among researchers and user communities, and to provide a forum in which researchers and users can exchange their findings and ideas.

Topics of interest include (but are not limited to):

Collaborative Robots and Unmanned Vehicles

- Intelligent autonomous vehicles and systems

- Control of a team of robots in a mission
- Cooperating autonomous robots
- Robots in crisis management
- Agent-based distributed robotic systems
- Companion and assistive robots

Human-Robot Interaction (HRI)

- HRI Multi-modal interfaces
- User interface designs and usability evaluations
- Interaction control in robotic systems
- Cognitive modeling/science in HRI
- Adjustable/adaptive automation
- Human-robot cooperation in teamwork
- HRI for heterogeneous teams
- Experiments on HRI collaboration
- HRI metrics
- Ethnography and field studies
- HRI applications

INSTRUCTIONS FOR AUTHORS:

Authors are invited to submit original papers to the special session organizers by **January 15, 2009**. Electronic (postscript or pdf) submissions are encouraged and should be sent to klin@mail.ucf.edu, jessie.chen@us.army.mil, and Louis.Chan@wpafb.af.mil. For other electronic formats, please check with the organizers. All submitted manuscripts will have at least three reviewers. Draft papers should not exceed 5000 words. In addition, include up to 6 keywords and an abstract of no more than 350 words. Submissions should also include the title, authors name, affiliation, e-mail address, fax number and postal address. In case of multiple authors, an indication of which author is responsible for correspondence must be indicated. For non-electronic submission, please send four copies of the manuscript to one of the special session co-organizers.

Consistent with standard practice, each submitted paper will receive a minimum of three reviews. Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. Initial selection will be based on full papers. Submission implies the willingness of at least one of the authors to register and present the paper, if accepted. All accepted papers in the Workshop **are required to be presented** and will be included in the Symposium proceedings. It is our intent to have the proceedings formally published in hard and soft copies and be available at the time of the conference. Instructions for final manuscript format and requirements will be posted on the CTS 2009 Symposium web site later.

SPECIAL SESSION ORGANIZERS:

Dr. Kuo-Chi “Kurt” Lin

Institute for Simulation and Training (IST)

University of Central Florida
3280 Progress Drive
Orlando, FL 32826 USA
Voice: (407) 823-0137
Fax: (407) 823-0208
Email: klin@mail.ucf.edu

Dr. Jessie Chen

Army Research Laboratory- Human Research & Engineering Directorate
12423 Research Parkway
Orlando, FL 32826 USA
Voice: (407) 384-5435
Fax: (407) 384-5454
Email: jessie.chen@us.army.mil

Mr. Louis Chan

Integrated Demonstrations and Applications Laboratory (IDAL)
Sensors Directorate
Air Force Research Laboratory
AFRL/Ryra
Bldg 620, 2241 Avionics Circle
Wright-Patterson AFB, OH 45433 USA
Voice: (937) 904-9597
Email: Louis.Chan@wpafb.af.mil

Technical Program Committee:

All submitted papers will be rigorously reviewed by the special session technical program committee members. (*to be confirmed)

Mr. Michael Barnes, U.S. Army Research Laboratory, USA
Dr. Jorge Dias, Universidade de Coimbra, Portugal
Dr. Rüdiger Dillmann, University of Karlsruhe, Germany
Dr. Cristina Urdiales Garcia, Universidad de Malaga, Spain*
Dr. Brian Goldiez, University of Central Florida, USA*
Dr. Eric Hendricks, U.S. Navy SPAWAR, USA*
Dr. Gordon Lee, San Diego State University, USA
Dr. Jun Peng, Central South University, China
Dr. Antonio Bandera Rubio, Universidad de Malaga, Spain
Dr. Randy Shumaker, University of Central Florida, USA
Dr. Jingang Yi, San Diego State University, USA
Dr. Changjiu Zhou, Singapore Polytechnic, Singapore*

IMPORTANT DATES:

Abstract Submission Deadline ----- January 15, 2009
Notification of Acceptance ----- February 7, 2009
Registration & Camera-Ready Manuscripts Due ----- March 3, 2009

For information or questions about the full Symposium's program, tutorials, exhibits, demos, panel and special sessions organization, please consult the conference web site at URL: <http://cisedu.us/cis/cts/09/main/callForPapers.jsp> or contact the symposium co-chairs: Bill McQuay at AFRL/RYT, WPAFB (William.McQuay@wpafb.af.mil) or Waleed W. Smari at the Dept. of Electrical and Computer Engineering, University of Dayton (Waleed.Smari@notes.udayton.edu).