

# Call for papers

*The International Conference on Multimodal Interaction (ICMI 2012)*

[www.acm.org/icmi/2012](http://www.acm.org/icmi/2012)



The International Conference on Multimodal Interaction, ICMI 2012, will take place in Santa Monica California (USA), October 22–26, 2012. ICMI is the premier international forum for multidisciplinary research on multimodal human-human and human-computer interaction, interfaces, and system development. The conference focuses on theoretical and empirical foundations, component technologies, and combined multimodal processing techniques that define the field of multimodal interaction analysis, interface design, and system development. ICMI 2012 will feature a single-track main conference which includes: keynote speakers, technical full and short papers (including oral and poster presentations), special sessions, demonstrations, exhibits and doctoral spotlight papers. The conference will be followed by workshops.

Topics of interest include, but are not limited to:

- *Multimodal interaction processing*  
Machine learning, pattern recognition and signal processing approaches for the analysis and modeling of multimodal interaction between people and among the different modalities within people; adaptation and multimodal input fusion and output generation, addressing any combination of: vision, gaze, audio, speech, smell/olfaction, taste, gestures, e-pen, haptic and tangible, bio-signals such as brain, skin conductivity, etc.
- *Interactive systems and applications*  
Mobile and ubiquitous systems, automotive and navigation systems, human-robot and human-virtual agent interaction, virtual and augmented reality, education, authoring, entertainment, gaming, telepresence, assistive and prosthetic sys-

tems, brain-computer interfaces, universal access, healthcare, biometry, intelligent environments, meeting analysis and meeting spaces, indexing, retrieval and summarization, etc.

- *Modeling human communication patterns*  
The modalities and the applications named above lead to a need for multimodal models of human-human and human-machine communication, including verbal and nonverbal interaction, affordances of different modalities, multimodal discourse and dialogue modeling, modeling of culture as it pertains to multimodality, long-term multimodal interaction, multimodality in social and affective interaction, multimodal social signal processing.
- *Data, evaluation and standards for multimodal interactive systems*  
Design issues, principles and best practices and authoring techniques for human-machine interfaces using any combinations of input and/or output multiple modalities. Architectures; assessment techniques and methodologies; corpora; annotation and browsing of multimodal interactive data; W3C and other standards for multimodal interaction and interfaces, evaluation techniques for multimodal systems.

Submissions in these areas are invited for workshop topics, special session topics, full papers, short papers, demos, and for the doctoral consortium.

## 1. Keynote speakers

As in previous years, we have invited three distinguished keynote speakers:

*Ivan Poupyrev*  
Senior Research Scientist, Walt Disney Corporation,  
USA  
<http://ivanpoupyrev.com>

*Charles Goodwin*

Social Sciences Division, University of California at Los Angeles, USA

[www.sscnet.ucla.edu/clic/cgoodwin/](http://www.sscnet.ucla.edu/clic/cgoodwin/)

*Roberta Klatzky*

Department of Psychology, Carnegie Mellon University, USA

[www.psy.cmu.edu/faculty/klatzky/](http://www.psy.cmu.edu/faculty/klatzky/)

## 2. Challenges

This year we invited the ICMI community to collectively define and tackle scientific Grand Challenges in multimodal interaction for the next 5 years. We received a good response to the call, and we are hosting four Challenge events:

*2nd International Audio/Visual Emotion Challenge and Workshop – AVEC 2012*

*Haptic Voice Recognition Grand Challenge*

*D-META Grand Challenge: Data sets for Multimodal Evaluation of Tasks and Annotations*

*Brain-Computer Interfaces as Intelligent Sensors for Enhancing Human-Computer Interaction*

For further details see here:

[www.acm.org/icmi/2012/index.php?id=challenges](http://www.acm.org/icmi/2012/index.php?id=challenges)

## 3. Call for workshops

ICMI 2012 will host workshops in emerging areas of multimodal interaction and multimedia processing. The ICMI 2012 workshop program aims to provide researchers with a more informal and discussion oriented forum to discuss emerging topics in multimodal interaction or old ones from a new angle. We are eliciting workshop proposals that break away from traditional conference-style presentation formats.

Workshops will be held on Monday October 22nd, 2012 and Friday October 26th, 2012, the days before and after the main conference. Workshops that run for anywhere between half a day and a full day are possible.

Accepted workshops will be given an ISBN number for inclusion of the proceedings in ACM Digital Library. The page limits for accepted regular workshop

papers are 6 pages, including all figures, tables, and references.

Workshop proposals should not exceed 5 pages. Evaluation criteria for workshop proposals will include the quality and level of details of the proposal, the theme of the workshop, its relevance to the main conference, and the overall balance of the conference workshop program.

For further details see here:

[www.acm.org/icmi/2012/index.php?id=cfw](http://www.acm.org/icmi/2012/index.php?id=cfw)

## 4. Important dates

Workshop proposals due: March 1st

Special session proposals due: March 7th

Main conference paper submission: May 4th

Demo proposals due: June 22nd

Main conference author notification: July 23rd

Camera-ready copy (long, short, demo): August 20th

Exhibit proposals due: September 26th

Challenges: October 22nd

Main Conference: October 23rd–25th

Workshops: October 26th

## 5. Publications

The proceedings of ICMI 2012 will be published by ACM as part of their series of International Conference Proceedings, and will be electronically available through the ACM Digital Library.

## 6. Organization

*General Chairs*

Louis-Philippe Morency (University of Southern California, USA)

Dan Bohus (Microsoft Research, USA)

Hamid Aghajan (Stanford University, USA)

*Program Chairs*

Justine Cassell (Carnegie Mellon University, USA)

Anton Nijholt (University of Twente, The Netherlands)

Julien Epps (The University of New South Wales, Australia)