

Human-Computer Confluence Research Challenges

May 14-15, 2012
Vienna, Austria

HC² VISIONS

MOTIVATION

HCI research over three decades has shaped a wide spanning research area at the boundaries of computer science and behavioral science, with an impressive outreach to how humankind is experiencing information and communication technologies in literally every breath of an individuals life.

The explosive growth of networks and communications, and at the same time radical miniaturization of ICT electronics have reversed the principles of human computer interaction. Up until now considered as the interaction concerns when humans approach ICT systems, more recent observations see systems approaching humans at the same time. Humans and ICT Systems apparently approach each other confluently.

Human Computer Confluence has been mentioned to become a research priority in "Horizon 2020" (2013-2020), the funding programme of the European Commission that follows after the 7th Framework Programme (FP7, 2007-2013).

HC² VISIONS is a research agenda solicitation action (FP7 FET Project HC²) which may or may not be influential to the FET work programme discussion on new directions in human computer confluence. The HC² VISIONS workshop invites key experts to pose initial research challenge statements articulated by the scientific community in a crowd sourced solicitation attempt. The goals of the workshop are to shape research challenge statements indicating (i) vision, (ii) research approach and (iii) expected impact of prospective research issues by world leading experts in the field. HC² VISIONS is accompanied by a web-based white-book initiative at www.pervasive.jku.at/hccvisions.

HC² VISIONS is an open dialog and invites interested scientists, researchers as well as industrial stakeholders to participate and actively engage. **If you want to present your idea in a 5 min position statement** in the HC² VISIONS dialogue sessions, please send an approx. 400 word **summary** to hc2visions@pervasive.jku.at by May 9, 2012.

WORKSHOP LOCATION

The workshop will be hosted by and is located at the head quarter of the Austrian Computer Society OCG. The objective of the Austrian Computer Society (OCG) is the comprehensive and interdisciplinary promotion of information processing, with due regard to its effects on man and society.

Austrian Computer Society (OCG)

Dampfschiffstraße 4, 1030 Vienna, Austria Phone +43 1 5120235-0

Meeting Room / How to get there The meeting will be held in "Sitzungssaal" of the OCG. When entering the building you have to register at the front desk. Signs will then guide you to the meeting room. A lunch table is reserved at Restaurant Wild, Radetzkyplatz, 1030 Vienna which is in walking distance to the workshop site. Coffee will be served at the workshop site. The premises of the OCG are close to the city center and can be easily reached by public transport. Underground lines U1, U3 and U4 have nearby stops at Schwedenplatz or Landstrasse/Wien Mitte. The two Airport Bus Lines also stop at Schwedenplatz respectively at Wien Mitte, which is also the city center stop of the Airport train CAT. For hotels and further directions follow www.pervasive.jku.at/hccvisions.

HC² VISIONS is organized by Institute for Pervasive Computing, Johannes Kepler University Linz, Altenbergerstrasse 69, 4040 Linz, +43 732 2468 8556, hc2visions@pervasive.jku.at, supported by the European Commission under the Future and Emerging Technologies program under grant 258063 HC2.

HC² VISIONS is structured as follows:

Monday, May 14

- 09:00-10:00 Registration
- 10:00-10:30 **Opening**
President Austrian Computer Society
Opening Remarks HC²
Welcome from HC² VISIONS
- 10:30-11:30 **Keynote**
Perception Beyond the Here and Now
Albrecht Schmidt, University of Stuttgart
- 11:30-12:00 Coffee
- 12:00-13:00 **Open Dialogue / Position Statements**
(5 min per Position Statement)
- 13:00-14:00 Lunch
- 14:00-15:30 **Invited Experts**
Living in Blended Spaces
David Benyon, interaction Design, Napier University
Towards Socio-Technical Urban Superorganisms
Franco Zambonelli, Università di Modena
Socially Interactive Systems
Paul Lukowicz, DFKI
Human Robot Confluence
Daniel Roggen, ETH Zurich
- 15:30-16:00 Coffee
- 16:00-17:30 **HC2 Roadmap Panel I - Structuring VISIONS**
- 19:00- Dinner

Tuesday, May 15

- 09:00-10:00 **Keynote**
Emotionally Intelligent Interfaces
Peter Robinson, University of Cambridge
- 10:00-10:45 **Invited Experts**
Mobiles in the Future Internet
Max Mühlhäuser, Technische Universität Darmstadt
Multisensory Internet Communication
Adrian David Cheok, National University of Singapore
- 10:45-11:15 Coffee
- 11:15-12:00 **Invited Experts (contd.)**
Interaction through cognitive prostheses
Ricardo Chavarriga, EPF Lausanne
Attention Recognition
Alois Ferscha, Johannes Kepler University of Linz
- 12:00-13:00 **HC2 Roadmap Panel II - Structuring VISIONS**
- 13:00-14:00 Lunch
- End of Meeting

