Child Computer Interaction SIG: Towards Sustainable Thinking and Being

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Abstract

The discipline of Child Computer Interaction (CCI) has been steadily growing and it is now firmly established as a community in its own right, having the annual IDC (Interaction and Design for Children) conference and its own journal and also enjoying its role as a highly recognisable and vibrant contributor to the ACM CHI conference. Having recently been given status as an IFIP (International Federation for Information Processing) TC13 working group, the community now needs to make plans around its academic themes and its coherence as a developing academic community.

The CCI SIG at CHI aims to use a mixture of facilitated creative thinking and a world café approach to bring the community together to tackle these two key challenges. The CCI SIG will be the natural meeting place for members of this community at CHI and will disseminate its discussion to the CCI and CHI communities through the production of visual and interactive materials at the CHI conference.

Keywords

Child Computer Interaction; Research Networks; Research Themes; Community Building

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms

Design, Human Factors

Introduction

When the IDC / CCI (Interaction Design and Children / Child Computer Interaction) community first came together in a structured way, it was as a group of individuals gathering in a workshop in Eindhoven in 2002. Daring to think it had realized something that might change the way its research had previously been published (scattered as isolated tracks and occasional papers in mainstream HCI and learning conferences), this, then small, community embarked on its own conference series and the rest, as they say, is history. Except, that as with all successful small innovations, the community has found itself growing bigger and bigger, the remit for CCI has expanded to include babies and teenagers, and the possibilities for new technologies and the discussion about their impact is growing year on year.

Within the international CCI landscape the CCI community has very recently been brought to a point of reflection and self-examination. After three years as a supported CHI community, an affiliation that gave the community a voice and a status at CHI, a different spotlight model, into which CCI, being a broad theme, no longer fits, has replaced the CHI communities. Alongside this, the IFIP (International Federation for Information Processing) have requested that the IFIP TC13 SIG (Special Interest Group) on IDC, which was the 'home' of the hitherto international community, be

'upgraded' into a working group (WG), a process which dictates that it now identifies, as a community, what its priorities and what its themes will be and lays out a mechanism for the ongoing existence of the international network. Taken together these two events appear to be saying the same thing '*you are a strong enough community and now you need to get organized, believe in yourself and lay out your (own) landscape*'

A SIG at CHI is the ideal place to facilitate this discussion. One challenge for the IDC / CCI community is that the nature of the work is such that many individuals have interests in both HCI and CCI and their time and energy has to be split accordingly. CHI provides an ideal venue for discussion that can cross to other disciplines rather than being solely internally thinking.

Background

The first major works in this area were arguably those by Papert [1], and Kafai [2]. These were followed by work by Druin and Solomon [3], Rogers and Scaife [4], and others. Since then a large body of work has been gathered that explores novel interaction technologies for children, methodologies for designing for and with children, and the design of, and testing of, new evaluation methods, etc. The community of researchers working in this area has acquired a shared reference framework of seminal works that influence the area.

The CCI SIG@CHI - Towards Sustainable Thinking and Being

There have been five previous IDC and CCI SIG events at CHI see for example [5-7]. Two of these have focussed on specific applications, the other three on the

general Child Computer Interaction community and direction. Over time we have had a remixed event, which tried to welcome newcomers and link to the intellectual heritage/capital of this community, a postcard event where we focused on a dynamic interaction speed dating style, to increase awareness in the community about research being done and group activity events where the challenge has been to find consensus.

In addition a workshop on methodology in CCI was held at Interact in 2005 [8], which led to a special edition journal on the same matter in 2008 [9]. The current SIG will focus on taking a step change towards maturity both in terms of academic identity and in terms of academic sustainability.

CCI can now take identity and coherence of the field as a given, and needs now to debate how to sustain its energy, improve its presence within CHI, identify themes for research attention and link effectively to other communities.

Thinking forward
The CCI SIG at CHI will open with a presentation showing how the community has behaved over the previous ten years. Participants in the SIG will be put into random teams and charged with creating a call for papers for IDC2015 derived from this information. Four 'non-participating' volunteers who will be seeking only to influence the activity - not the thinking, will facilitate discussion.

Being an independent community
In the second part of the SIG, two or more models for the future shape of IDC will be presented (a call for

ideas to this end will be placed on the IDC-SIG website and mailed to all members three months ahead of the conference), and the SIG attendees will discuss these models and provide feedback and comment. It is hoped, but is not essential, that one model might be considered the most useful going forward.

Community Time
In a facilitated discussion, participants will be able to share their current work within the umbrella of impact. Each participant will be given a short space of time to explain their current work in terms of the impact on the community that it aims to make.

The key outputs will be promoted on the International IDC community website at http://www.idc-sig.org/ and circulated as a working document at the Interaction Design and Children Conference (IDC2014) in Aarhus.

Organisers of the SIG
The four organisers represent the UK, US, Nordic and European communities each of these having it's own traditions in HCI. Janet Read was the general chair of the first IDC conference, Juan Pablo Hourcade has been paper chair for several conferences and has attended ALL the IDC conferences, Panos Markopoulos co-chaired the first IDC event – the workshop in Eindhoven and Ole Iversen will chair the next IDC conference in Aarhus in 2014. All four are on the editorial board of the International Journal of Child Computer Interaction and all four have published widely in this discipline.

Attendees at the SIG
The SIG will advertise for attendees by emailing all authors of papers and events relating to child computer

interaction (who are already at CHI) as well as using its own mailing list and promoting the SIG on the IDC-SIG website. It is expected that in the region of 40 – 50 people will attend.

References

1. Papert, S., *Mindstorms, Children, Computers and Powerful Ideas*1980, Great Britain: Basic Books.

2. Kafai, Y.B., ed. *From Barbie to Mortal Kombat, Gender and Computer Games*. 1990, MIT Press. 90 - 110.

3. Druin, A. and C. Solomon, *Designing Multimedia Environments for children*1996: John Wiley and Sons Ltd.

4. Rogers, Y., et al., *Conceptual Framework for Mixed Reality Environments: Designing Novel Learning Activities for Young Children. .* Presence Teleoperators and Virtual Environments, 2002. **11**(6).

5. Read, J.C., et al. *Child computer interaction*. in *CHI 2008*. 2008. ACM Press.

6. Revelle, G., et al. *CHI 2010 special interest group: creating prosocial media for children*. in *CHI 2010*. 2010. Atlanta: ACM Press.

7. Revelle, G., et al. *Tangible user interfaces for children.* in *CHI 2005*. 2005. ACM Press.

8. Markopoulos, P., et al. *Child Computer Interaction: Methodological Research*. in *Interact 2005*. 2005. Rome, Italy.

9. Markopoulos, P., et al., *Child Computer Interaction - Methodological Research.* Cognition Technology and Work, 2008. **10**(2): p. 79 - 81.