

## Child Computer Interaction

Child Computer Interaction is a new community for CHI. It is a place for contributions where a method or a design is proposed that is especially suited to children and that could not sensibly be easily adapted for adults.

We are keen to have contributions to all the usual CHI tracks but are also offering four special tracks for our own extra special community☺. These are:

- Child Partnership Projects (CPP): A design competition for teams that include children.
- Participatory Papers: Scholarly publications that are disseminated for children readers. (i.e. written in a different way)
- Lessons from the Trenches: Targeting industrial cases and experiences. A lively venue where experiences can be exchanged, and researchers can be exposed to the realities of industrial practice in this domain.
- Theatre pieces: High quality video contributions, available in a library after the conference, of methods that can be re used and learned from.

We encourage you to contribute to this community. For more information please contact the chairs.

Join us in making this the snappiest happiest place to be in CHI 2011

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# A Community for Child Computer Interaction

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**Abstract**

We propose a CHI community for Child Computer Interaction (CCI). This community has more than quadrupled in size over the last eight years, has had 8 conferences in both Europe and the U.S. and has, during that time, reached a maturity that befits a CHI community. The breadth and depth of the proposed chairs' collective experience offers a glimpse of what might be possible with this CHI community for the future.

**Keywords**

Children, Interaction Design, Child Computer Interaction, Evaluation, Design

**ACM Classification Keywords**

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**General Terms**

Design, Children

**Introduction**

The Human-Computer Interaction Community is forever changing. Initially emerging from the ergonomics and socio-technical research agendas and providing guidance and research into work-based systems, the HCI community has always been flexible and open and so changes in the way people communicate, learn,

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work and play have all impacted the HCI agenda. Nowadays research is more often than not focused on user experience rather than on usability, on playfulness rather than on productivity, and on communication rather than control.

### **Child Computer Interaction and HCI**

Out of this flexibility and openness, Child Computer Interaction has emerged as a research discipline within HCI. Child Computer Interaction is that part of Human-Computer Interaction where the humans are children (where children can be aged 3 – 16). It is difficult to pinpoint exactly when CCI began; early works by Papert and Kay, follow on work by Kafai, and then work by Druin and Solomon, all drove the discipline forward in its early days. This activity and enthusiasm manifested itself in the development of the ChiKids community and resulted in growing an energetic new community.

The community has enjoyed significant growth since the start of the new millennium largely as a result of the development of an international conference, Interaction Design and Children, which is ACM sponsored. This conference series grew from a workshop hosted by the Eindhoven University of Technology in 2002 [1] (attended by over 100 people), through a conference held at the University of Central Lancashire in the UK in 2003, and then the conference moving to the University of Maryland in 2004. Since then the IDC conference has been held annually in venues across Europe and the United States.

Despite having its own conference (where between 40 and 60 papers are published annually), the CCI community continues to publish large numbers of

papers in mainstream HCI venues including Nordichi, Interact and British HCI. Specifically, interest in the CHI conference is extremely high and shows no sign of diminishing. Indeed, a quick search of archived CHI papers in the ACM DL (as shown in Figure 1) shows that CCI is a primary venue for publishers.

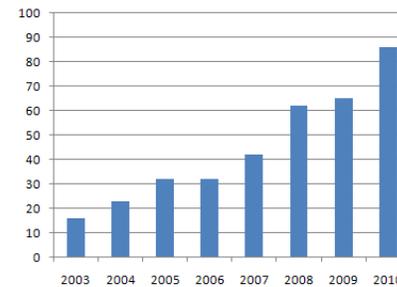


Figure 1 - Number of papers published at CHI with 'children' in their content

The CCI research community created an iFIP group in 2009 ([www.idcsig.org](http://www.idcsig.org)) and is currently proposing its own journal. It has produced four special edition journals [2,3,4,5] (and one more under production), several books [including 6,7,8], and has acquired a Forum in Interactions: Lifelong Interactions. Several courses, panels and special interest groups on Child Computer Interaction have been held at CHI, Interact and IDC and at least one university offers an MSc in Child Computer Interaction.

The community is estimated to be made up of in the region of 500 people which would include around 150 PhD students and research assistants. A much larger number of individuals do related work though their research focuses on contributing sub-fields of CHI, e.g.,

tangibility, education, etc. Such works are invited to participate, and will be evaluated based on the contribution to the CCI field. Despite the diverse intellectual traditions brought together in CCI, the community has managed to be successful into creating an identity, (with people feeling they belong there and submitting regularly), building up a body of works that are common ground for all community members and fostering a creative and truly interdisciplinary debate at the various gatherings that take place.

Child Computer Interaction is a key community for CHI2011 and beyond.

### **The CCI Community at CHI**

The CCI community has traditionally focused on the development of new methods for evaluating interactive technologies for children; examples include the picture cards methods for obtaining verbal data, the fun toolkit for supporting surveys with children, the SEEM inspection method, etc. (see [2] for an overview) and refinement of new practices for engagement with children including co-design, co-investigators and informant design, the refinement and understanding of interactivity and children, with, for example, studies on children's pen and mouse behaviors and the investigation of specific technology spaces like laptops tangible interactivity and head up games being just a few examples.

At CHI, the CCI community will want to attract papers and contributions that represent real advances in the understanding of, or development and refinement of methods for, child computer interaction. It will also seek to unearth groundbreaking innovations addressing the needs, capabilities and preferences of children that

have the potential to become reference works for developments in this field.

By its very nature, The CCI community will have to be divergent in its thinking at CHI; it must also be about two of the mainstream CHI communities – engineering and design, but will potentially also be concerned with many of the communities of technologies (Smart devices, surfaces, mobile), of experiences (Play, Learning, Communication) and of methods (participatory design, evaluation).

Our view, for CCI is that a contribution belongs here if it has, **as its main contribution, a method or a design that is especially suited to children and that could not sensibly be easily adapted for adults**. The benefits to researchers in submitting to this community are that in those instances, the review panel would be evaluating the value of the contribution to the general area of child computer interaction, could propose how it might incrementally fit with other related work, and could disseminate that work within this vibrant and well connected community.

### **Stimulating Interest - Uniqueness**

The community would support the traditional tracks of papers, notes, courses, WIPs, panels but would also include four novel possibilities these being "child partnership projects", "participatory papers", "lessons from the trenches" and "theatre pieces".

- Child Partnership Projects (CPP): A design competition for teams that include children.

- Participatory Papers: Scholarly publications that are disseminated for children readers. (ie written in a different way)
- Lessons from the Trenches: A lively venue where industrial practice and experiences can be discussed exposing researchers to the realities of industrial practice in this domain.
- Theatre pieces: High quality video contributions, available in a library after the conference, of methods that can be re used and learned from.

### People and Practices

The CCI community will be chaired by Janet Read, Allison Druin and Panos Markopoulos. These three authors have all chaired the IDC conference, have all written books and papers on CCI, and have all served as CHI associate papers chairs (and in the case of Allison Druin also as a subcommittee chair). The three chairs are regular CHI attendees, and one has served on 7 CHI conference committees as the founder and chair of CHIkids. All three of these chairs can promote this community in Europe and North America as well as Asia and Africa where one of the chairs travels extensively to give talks and conduct research.

The committee will be made up of a selection of the other past chairs of IDC and other individuals who have made significant contributions in this field and who combine expertise from various areas of CHI, e.g., tangible interaction, surface computing, user

experience, participatory design, ubiquitous computing, and education.

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