
Symposium 2017: HCI Across Borders

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Abstract

At CHI 2016, the Development Consortium titled HCI Across Borders (HCIxB) was widely attended by 71 participants from 20 countries and six continents. The goal of this workshop was to build community and invite collaborations “across borders” on themes of interest for the participants – researchers actively involved in international HCI research, with many of them working in parts of the ‘developing’ world. In 2017, our goal is to extend these conversations to fuel community building *beyond* the workshop. The question we ask, therefore, is how we might align our efforts to reach potential members of our larger HCI community, even those who do not or are unable to attend CHI, to work towards a more cohesive global community. Further, we ask, what might the format of these efforts be? We invite proposals along these lines with the intention of bringing people together to discuss and workshop ideas for research directions, venues, activities, and events that would be natural extensions of HCIxB 2016 as well as HCIxB 2017, that we propose herein.

Author Keywords

HCI; Across Borders; Community; Bridges; Global South

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Introduction

The focus of traditional Human-Computer Interaction (HCI) research has largely been on relatively homogenized groups of users, mostly in technology-rich settings. As computing technologies become more ubiquitous throughout the world, including across relatively underserved communities and populations, there is a growing need to better understand how diverse communities adopt and interact with these computing technologies and how they might, in turn, be leveraged to drive new interactions as well. Fields such as Information and Communication Technology and Development (ICTD), for example, have seen significant growth - in the last decade - of research initiatives that examine the intersection of computing technologies and global/sustainable development [1-3]. An HCI focus centers the conversation around the relationship between human actors and their technological interactions, which can significantly advance our understanding of the role that technology might play towards shaping societal change.

Within the HCI community, progress regarding research focused on diverse international sectors has been slow. Many HCI researchers are still in the process of learning to appreciate the relevance of studying HCI in these international settings, whether from an interpretive or interventionist perspective. Our focus in this workshop is to invite HCI researchers who work across different international and transnational settings, and in different research sectors, to come together and envision ways in which we – as a community – can improve the

synergy and impact of our work. We aim to bring greater awareness to the challenges that plague international research in resource-constrained contexts.

This visibility and awareness is important for the field of HCI overall, as it increasingly turns its view to studying populations and technologic interactions that remain relatively under-studied and under-served. The mobilization of HCI researchers globally is also important if the field of HCI is to have impact on the world as a whole in a balanced way. Certainly the CHI community understands, today, that the results of HCI research in, say, the US cannot be blindly translated and deployed to other cultural contexts, such as Kenya, Mexico, or India. Similarly, advancements in countries of the South may look different and require a particular socio-technical lens to identify and understand. By studying less familiar contexts, we get a deeper understanding of the problem/solution space itself, which, in turn, leads to better outcomes everywhere.

HCI Across Borders (HCIxB) 2016 was organized as a Development Consortium at CHI with a view to bring together researchers in these spaces – those either living and working in the South as well as those with a commitment to working there even as researchers in academic/industry circles in the West. We were successful in our efforts, as we raised the funds to bring in 55 participants to the workshop. The sum total of 71 participants represented 20 countries, four of which had never been represented at CHI before (to the best of our knowledge). We have since remained in communication, either through social media channels (we created a Facebook group for HCI Across Borders last year – it now has 111 members and is an active and growing forum) or through email directed towards

future community building efforts. The communication, collaboration and discussion has created bridges across borders which has been our baseline to take the effort to the next level. Even this extended abstract is a result of a collaboration that emerged out of conversations that took shape at CHI 2016.

This year, HCIxB's main objective is to strengthen our connections, but with a focus on a cause that is common to us all – to build bridges with the larger HCI community and identify ways in which these bridges can be beneficial to all individuals involved. Aiming to dismantle 'us-versus-them' approaches and to share our research and practice across disciplinary and geographic boundaries, we would like to enhance the ties we share across the board. The Sustainable Development Goals (SDGs 2015-2030) indeed focus on the need to converge disciplinary areas of work (e.g. health, education, protection, etc.) in coming decades [2]. We firmly believe that this could only lead to a future where HCI has a larger and more global impact, reaching individuals and communities that are yet to be included in its purview.

Background

The field of HCI has been slow but steady to develop its roots in regions of the Global South, where we have seen growing HCI research efforts in the recent past, as also discussed in a recent review by Dell and Kumar in [1]. There are many challenges in doing this work, such as addressing overcrowded and understaffed conditions, linguistic and sociocultural barriers, insider/outsider biases, among others. Though we typically situate ourselves in a small number of these relatively isolated contexts where we work, there is value to be gained from connecting with members from the larger

HCI community who publish at the same venues we do, pursue similar research/practice agendas, and/or are ideologically aligned towards social impact. Bridging research divides is important for many communities, but especially so when there is potential for greater impact in terms of research and society, as is true in our case. Members of our international HCI community are widely dispersed, with few opportunities to connect - virtually or in person - with their counterparts in other regions. CHI becomes the perfect venue for us to meet at, not just because it is the premier venue for all things HCI, but also because congregating at CHI allows new members to recognize the tremendous reach of CHI within minutes of attending the conference. There is no dearth of positive feedback that was received to this effect after HCIxB '16.

The first workshop for those engaged in HCI research in the so-called 'developing' world was organized at CHI 2007 and attracted over 37 participants from 15 countries. SIGCHI and NSF gave grants to cover travel costs for participants from 'developing' countries to participate in a discussion about what was needed and/or desired in this area of work. Several other conferences have since created room (e.g., workshops, panels, and invited talks) for community members to participate in face-to-face interactions. The focus of prior discussions has been on the relevance of our work for the larger HCI community, how community members from different disciplines can build a common understanding, and so on. These are concerns that are characteristic of an emerging area of research.

Our intended work is no more defined in 2017 than it was in 2007. If anything, with the rapidly moving pace of technological innovation, paired with the global

refugee crisis and ongoing environment disasters worldwide, mobilizing community around HCI to support research and development in these complex and challenging contexts is desperately needed. While much work is being done, we still lack a clear network of communication and knowledge dissemination to build on and learn from work happening, sometimes literally under fire, in settings around the world.

At this point, we not only have a sizable body of HCI research published over the years, we also have a growing community of researchers and practitioners, and there is deeper appreciation of the gap that our work addresses for the larger HCI community. The challenge we addressed with HCIxB '16 was of *building a globally connected community*. This year, our focus is not just on strengthening our ties *within* this community, but on strengthening these ties *across HCI* as well.

Organizers

Neha Kumar is an assistant professor at Georgia Tech, appointed at the schools of International Affairs and Interactive Computing. She focuses on human-centered computing and sustainable development. She graduated from UC Berkeley's School of Information and was a postdoc at University of Washington Computer Science & Engineering and the Annenberg School of Communication at University of Southern California.

Susan Dray is President of Dray & Associates, Inc., where she provides contextual and ethnographic user research, usability evaluation, and interface design consultation for a wide range of products systems, and applications. She contributed to the founding of ACM

SIGCHI, was the 2006 recipient of the SIGCHI Lifetime Service Award, the 2015 recipient of the SIGCHI Lifetime Achievement in Practice Award and the 2016 recipient of the UXPA's Lifetime Achievement Award. She is also a Fulbright Scholar, an ACM Distinguished Engineer, and a Fellow of the Human Factors and Ergonomics Society.

Christian Sturm is professor at the Hamm-Lippstadt University of Applied Sciences in Germany. He holds a bachelor in computer science from Furtwangen University and a PhD in cognitive psychology (major), cultural anthropology (minor), and telematics (minor) from the University of Freiburg. His research interests include cross-cultural aspects of HCI, UX and entrepreneurship.

Nithya Sambasivan is an HCI researcher interested in the usage and application of technologies in the Global South. She is currently a User Experience Researcher at Google, exploring the socio-technical practices and implications of the internet in emerging markets. She has a PhD. in Information and Computer Sciences from UC Irvine, and a Master's in HCI from Georgia Tech. She has interned at Microsoft Research India, IBM TJ Watson, and Nokia Research Center.

Laura S. Gaytán-Lugo is an adjunct professor at the University of Colima in Mexico, appointed at the School of Mechanical and Electrical Engineering. She focuses on human computer-interaction, mainly in serious games in order to improve the skills of children from developing contexts. She got her Ph.D. from the University of Guadalajara and is a member of Mexico's National System of Research.

Leonel Morales is a professor and researcher at Francisco Marroquin University in Guatemala. His research interests include abstract models of user interfaces, programming languages for children and young students, social interactive platforms and crowd-computers interaction. He graduated from Francisco Marroquin University with degrees in information systems engineering and electronic engineering. He also obtained a master's degree in information systems from Galileo University in Guatemala. He has been a university professor for more than fifteen years.

Negin Dahya is an assistant professor at the University of Washington Information School. Her work is focused on the social and cultural context of digital and social media production and use for and by non-dominant and underserved communities locally and globally. Her international research has been focused on the role of information and communication technology in the ecology of refugee education in refugee camps in Kenya. Dr. Dahya received her PhD from York University's Faculty of Education (Toronto, Canada).

Nova Ahmed is an associate professor at North South University, Bangladesh. She completed her PhD at the Georgia Institute of Technology and went back to her home country to teach. She has a systems background and loves to solve a variety of problems. HCI comes in the way naturally when these problems need to look at 'developing country' challenges and opportunities.

Building Bridges

Crossing boundaries to build community is a goal that we carry over from HCIxB '16. A new goal that we have added to that for this year, as mentioned throughout

this proposal, is that of building bridges between those who conduct HCI research in the global South, facing an array of challenges common across contexts in this region, and the larger HCI community. Our symposium will ensure that the marathon efforts (in terms of labor and funds – particularly from SIGCHI's Development Fund) from HCIxB '16 continue to bear fruit and become more sustainable, but also allow for the work of the participants of this community (those who attend in person and in spirit – through our social media channels) to be better integrated towards a global HCI research community.

Feedback collected at the end of HCIxB '16 has played a major role in driving this year's effort. In order to build more bridges, we plan to rely on elements that worked well in prior workshops. These include (1) the mentor-mentee model where senior members of the community help junior members to connect with the field and consider the position of their work within it, (2) interactive activities to foster challenging and meaningful conversations about what may seem to include disparate areas of work, and (3) workshop elements structured around collaborative knowledge creation.

Website

Our website, <http://hcixb.org>, will be used to present information *before the event* - the program, call for proposals, and other details, *during the event* - a space for updates to be noted, with regards to logistics and online participation, and *after the event* - a resource for those who participated both in person and in spirit (or via social media). Our goal through this website is to create a growing archive of resources we can return to every year.

Pre-Workshop

We invite participant teams to submit 2-4 page position papers (to submissions@hcixb.org in CHI Extended Abstracts format) in which they reflect on their experience thus far in collaborating across borders (What are the challenges they face(d)? How and where have they seen success in cross-border collaborations?) and then propose their plan for how we might bring “across borders” elements to different aspects of the CHI community. This might include the proposal of new domains of interest, new ways to bridge disparate areas of HCI, or the next venue for us to connect at, to give a few examples. Formed partnerships or those in the process of forming will be welcome. If the partnerships were formed as a result of HCIXB '16, even better. We also invite those who are *yet to partner* to propose ideas where they might be seeking other team members. We will match them with other individuals and/or teams.

We seek participants who are *new and familiar* to doing cross-border HCI work in resource-constrained contexts. The experienced members of this HCIXB community will serve as mentors to the newer members in this space. Based on our list and number of participants, we will identify mentors who will be able to provide appropriate guidance to junior participants. Last year, we were fortunate to have 19 expert mentors who played an indispensable role in guiding several new, student participants. Our singular focus is to build and engage an HCI community that crosses borders so that we can holistically address HCI needs of under-served, under-represented, and/or under-resourced populations across the world.

We will be as inclusive as possible, approaching this Symposium with the goal of adding volume to voices in thus far ‘less heard’ clusters of HCI. To maximize participation, we will target every mailing list and research/practice network that we have access to across the continents. We will, of course, begin with accessing the venues we targeted last year, which brought us a good number of participants. We do have a diverse group of organizers and people who have voiced a willingness to participate. To further increase participation we plan to do considerable fundraising to sponsor travel for participants otherwise unable to get funding. Last year approximately 55 of our participants received partial or complete sponsorship to attend.

Further, just as it happened last year, there will be individuals who will be interested but unable to attend, since up-front costs (and untenable visa processes) can pose a challenge to manage. For this reason, we are keen to maintain a social media presence, live streaming presentations and ‘talking’ sessions, and allowing for Facebook/Twitter/Slack to be a part of the workshop experience. Slack, in particular, appears to provide a promising means of keeping people engaged across geographies.

Workshop Structure

Our workshop will be held over two days and organized into six sessions. Two days will give participants time to get to know each other, connect based on their specific interests, and work together so as to leave after having met a concrete goal for a deliverable.

Day 1 will begin with a welcome and introductions. In Session 1, participants will work in small teams to list out what they share in common as a community. This

will involve introductions in ‘Madness’ style so that participants get to know each other (and their research interests) better. We will also accommodate posters if participants would like to bring some to indicate their research interests. In Session 2, participants will form groups and brainstorm on their respective group ideas on how we might build bridges with the larger HCI community. In Session 3, we will introduce mentors to the teams. These mentors will have specific areas of expertise and teams will be able to talk to different mentors and get their thoughts on proposed ideas. At the end of this activity, mentors will be matched with teams and work with them to further develop their plans. In Session 4, teams will draft a first version of a proposal to pursue their idea, e.g. an edited volume, a workshop, etc., prototyping it in written form, as a video, or any other format of their choice. In Session 5, they will get feedback on their ideas from 2 other teams, and iterate. The final session will consist of 5 minute presentations of each group’s ideas. As we did last year, we would like to invite members of the SIGCHI Executive Committee to listen to these presentations and present awards to the teams to recognize their efforts.

Post-Workshop

In 2016, the abstracts each team came up with were edited into an article that has been put forth for publication in *Interactions*, just before CHI 2017. We would like to do something similar for our 2017 symposium. Teams will be requested to submit an abstract or summary of their weekend experience. These will all be combined to offer a synopsis of the symposium. We will also aim for a set of venues where we might continue this work.

Day One	
09.00-09.15	Welcome
09.15-10.30	Introductions
10.30-11.00	Tea/Coffee Break
11.00-12.30	Session 1: Posters
12.30-14.00	Lunch Break
14.00-15.00	Session 2: ‘Building Bridges’
15.00-15.30	Tea/Coffee Break
15.30-17.00	Session 3: Matching with Mentors
Day Two	
09.00-10.30	Session 4: First Prototypes
10.30-11.00	Tea/Coffee Break
11.00-12.30	Session 5: Pair, Share, Iterate
12.30-14.00	Lunch Break
14.00-15.00	Session 6: Final Presentations
15.00-15.30	Tea/Coffee Break
15.30-17.00	Closing

Call for Papers

The HCI community at CHI has expanded its scope in recent years to study diverse and under-represented populations across the world, including parts of the Global South. We invite individuals who identify themselves as researchers/practitioners who are keen to (or keenly) pursue HCI research and practice in these under-served, under-represented, and/or under-resourced regions of the world.

While technological and methodological advances are critical for further development of our community, so too is it important for us to stay connected. We often work in relatively isolated, geographically dispersed contexts and rarely find the opportunity to associate with others around the globe. The *first* goal of our workshop, then, is to build community, also continuing

the work that was begun at HCIxB 2016. Our *secondary*, and larger objective is to identify how we might build bridges between ourselves and the larger HCI community. The first goal is fulfilled by ensuring that this workshop takes place, and that participants are able to congregate in one physical location and engage in conversations with each other through the event. The second goal will rely on the teams coming up with detailed and innovative designs for building bridges across themselves and the larger community. We will make sure that all participants have the support and guidance they need from the organizers and mentors present at the event.

Examples of ideas participants pursue might include a plan to put together a book, a workshop, or a special issue of a journal, depending on the research and publishing inclinations of the participants. These books, workshops, or special issues (among others) would target specific concerns of researchers working in resource-constrained and/or cross-cultural contexts. They might focus on empirical studies, but might also focus on building theory. Participants writing a proposal together might all be working in the global health domain, or they might have different methodological leanings for diversity, for example.

Submissions should discuss a plan to collaborate 'across borders' but also build bridges across communities, or bodies of work if you will, identifying the bridges they will build. If additional collaborators

are sought, submissions should describe desired expertise/profiles/locations. All submissions will be reviewed by the organizers and, if needed, a small program committee, and selected according to their potential to contribute to the goals of the Symposium, fostering discussion. Accepted submissions will be available on the website at least two weeks before the conference to allow participants to look at who else might be there.

We understand that not everyone who wishes to participate will be able to attend physically due to financial or other constraints. We invite expressions of interest to participate (via email) and will work to accommodate these participants on our 'virtual track' which will include as comprehensive an overview of the workshop as we can provide using social media channels.

References

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