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CHI 2016 co-chairs Jofish Kaye and Allison Druin talk with keynote speaker Salman Khan, founder of Khan Academy.

CHI 2016: Global, Diverse, Good

What can 1,000 scientists achieve when they invest one hour doing voluntary work?

By Nur Al-huda Hamdan

In the heart of Silicon Valley, the CHI 2016 conference broke through new ceilings. CHI (pronounced kai) is the most prestigious international conference in the field of human-computer interaction (HCI). It attracts researchers, designers, engineers, and artists who want to (re)shape technology and media to enhance people's quality of life. This year, the conference took place in San Jose, CA. More than 3,800 participants from 52 countries presented their work in various media formats: keynote presentations, media installations, interactive demos, and posters.

For her opening keynote, Nigerian-American journalist and author Dayo Olopade, portrayed the challenges she faced moving from the U.S. to Nairobi. She addressed how the demographics and culture of different countries are unique and should be taken into account in the design of new digital tools. Olopade took the audience on a voyage to Africa where she slowly dissolved the western lens, allowing attendees to see beyond chaos and desperation to

reveal Africa's unconventional systems as an efficient act of "kanju"—a term that refers to the creativity that comes out of African difficulties. She showed areas in Africa where the informal infrastructure, streets and neighborhoods, did not make it into any map app or address book system. Her apartment in Nairobi "was best triangulated by using a Chinese restaurant, a petrol station, and an enormous pothole." Olopade encouraged the CHI community to view Africa in a more positive light. Instead of trying to westernize it with new tools, attempt to understand the continent as a whole and design *for* Africa. Although Amazon, Uber, and better postal services are needed in Africa, implementation cannot happen in the same way it does in Silicon Valley.

CHI touched upon other serious and global issues, such as the Syrian refugee crisis. Reem Talhouk and colleagues shared their own experience and research with Syrian refugees, and the challenges refugees face: including access to services, integration into host communities, and fleeing to safety. The panel also discussed how the research community can have a more actionable role toward aiding this emerging population, and emphasized collaborative research. In a time of increasing political and economical crises, Vasillis Vlachokyriakos and colleagues examined how HCI can promote democratic practices and social justice. They debated digital tools that open new avenues to alternative modes of political organization, civic

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participation, and heightened awareness of the various power relations at play.

Education was one of the hottest topics at CHI 2016. Two other keynote speakers, Salman Khan of Khan Academy and Kimberly Bryant of Black Girls Code, spoke of new ways to deliver quality education to everyone. Khan pointed out online education should complement the physical classroom and not replace it. In turn, Khan Academy is working with several schools to test new teaching techniques and materials that would enhance students' learning experience by combining the two learning methods.

In the words of the conference chairs, CHI 2016 was “a more humane conference, transparent, data-driven, and accounted for the importance of families and work/life balance.” Women had a strong presence in all disciplines and positions. They were (vice)presidents, professionals, professors, doctoral candidates, and students in attendance. Making CHI one of the most diverse scientific conferences out there. For the last three years, the conference hosted the CHI Women's Breakfast for about 100 attendees to celebrate women in computing and discuss the gender gap in computer science fields. This year the conference renamed this event; the “Diversity and Inclusion Lunch” had 500 diverse attendees. Aspects of diversity were expanded beyond gender to include aging, disability, physical appearance, race, ethnicity, nationality, marital status, and mental health. Speakers shared their personal stories and explained how they stood up in the face of these challenges by establishing support groups and speaking up. But inclusion may not be as simple as diversity reports on company dashboards. Karen Holtzblatt moderated a panel on the status and challenges of minorities in high tech. While many companies have implemented new recruitment techniques to reduce bias against underrepresented groups, Holtzblatt called on companies to take the next step and understand the experiences of these groups so they would “stay, advance, and thrive.” At the conference level, the organizers did just that by providing parent attendees with free-of-charge child care at the conference site.

A core framework in HCI is “user-centered design”—understanding your users, design, evaluate, analyze, and iterate. Each year, CHI organizers take this concept for a test drive holding several sessions, such as the ACM SIGCHI Town Hall Meeting and CHI Chairs Ask Me Anything (AMA), to discuss with the community how the conference programs, the review process, as well as the publication and dissemination channels could be enhanced. This

year, in “Transparent Statistics in HCI,” session attendees brainstormed new ways to inquiry the quality of data acquisition and analysis in research papers, and encourage authors to publish their data and replicate other studies.

The CHI 2016 theme was “chi4good.” For the first time, conference organizers cracked the shell that separates scientific conferences from surrounding communities. Attendees were asked to arrive one day before the beginning of the conference to spend a few hours partaking in community work. As a result, more than 700 hours were spent volunteering for local nonprofits in the Silicon Valley area.

CHI 2016 demonstrated how the impact of the science community can traverse beyond paper format to affect people in their current environments. Conferences of different fields should work on engaging scientists in more community and volunteer work to bridge the gap between incremental science and people's real and current needs. Encouraging different institutions to work together to do good leads to new networks, an exchange of expertise and knowledge, and future collaborations.

To this day, the field of HCI and the CHI community have put forward proposals to address many real-world problems. These solutions still need more investment and must reach the right people for them to have the desired impact. But what about prevention tools? How can HCI equip people with tools that help them avoid rather than merely cope with crises? How can HCI help people become more informed of their economical and political spheres, or even the “fine print” on the products they purchase on daily basis? These are questions the CHI community will have to answer

After five days, CHI 2016 concluded. Attendees left the San Jose Convention Center with new aspirations and inspirations. CHI has been celebrating research in the field of HCI for the past 34 years. But this year, the conference set out new goals with a global scope. The evidence presented this year points out the intricacies of different populations, and how targeted design is more impactful than one-design-fits-all.

To access the conference keynotes and presentations: check out the YouTube channel “acmsigchi.” And for access to the conference proceedings, check out the ACM SIGCHI conferences website; <http://www.sigchi.org/publications/toc/>.

Biography

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