

ATTENDEE-SOURCING

Anant Bhardwaj (MIT)

Juho Kim (MIT)

Steven Dow (CMU)

David Karger (MIT)

Sam Madden (MIT)

Rob Miller (MIT)

Haoqi Zhang (Northwestern)

A
design-space exploration
of
how to collect inputs
from
members with different roles in a
community
to
solve real-world problems



CONFERENCE SCHEDULING

A Large Conference (CHI)

- 4 days
- More than 500 papers
- 16 parallel sessions

PAPER BASED PROCESS

PROCESS

- Mark papers by subcategory
HELPs group
1. Put papers by theme on tables
 2. Add TOCHI & Case Studies in the mix
 3. Start creating 80 min sessions (Papers, TOCHI, Long Case Studies) { 20m Notes, Short Case Studies }
 4. When a stable session occurs — mark by "persona"
 5. More stable sessions to Janée

PERSONAS (?)

Games •
Social Computing •
Interaction Techniques • (UIST)
& hardware
Mobile (apps) • + MOBILE DEVICES
Usability & UX •
Design — practice
— research
Privacy & values •
Accessibility •
Education & learning •
Web •
Qualitative •
Methodologies & new processes •

Keynotes	2
Panels	12
Papers	287
Notes	83
TOCHI	24
Case Studies Long	37
Case Studies Short	16
Courses	65 units
Award lectures	4

"Smaller" personas

Health +
Arts +
Sustainability +
Kids +
Viz +
Cool & eclectic +
Global Reach +
HCI Theory





Thursday	X01 D Award talks 24/00	X02 E 4+1 Int.Tech + Dev.	X03 F Panels 481	X04 G 452	X05 A 424	X06 B Larger courses 207	X07 C Larger courses 207	X08 Q 424	X09 H 257	X10 J 219	X11 K 400	X12 L 400	X13 M Smaller courses 47	X14 N Smaller courses 40	X15 O Smaller courses 72	P X16 S16s
9:30-10:50	Award lecture 1201	TOUCH TEXT ENTRY Panel-110 "WHAT DO YOU SEE IN THE EYE SEE?" From Atoms & Bits to Entangled Practices Michael Weigert, M. Michael Weigert, Daniel Rostan, Daniel Rostan, Antonio Valencia, Antonio Valencia, Paul Sander, Paul Sander, Mark Rödel, Mark Rödel	Panel-111 "INHIBIT HEAVILY LESTURE" Politics, Power, and Passion: Engaging U.S. Policymakers Janet Davis, Janet Davis, Ivan P. Hirsch, Ivan P. Hirsch, Juan Pablo Rodríguez, Juan Pablo Rodríguez, Luis P. Rondon, Luis P. Rondon, Janice Tsai, Janice Tsai	Panel-112 "NO CROWDS SURING PEER PRODUCTION" Panel-113 "I USE THE FORCE IT GIVES US, FIRST" How-to-guide: Collaborating with developers in a professional world James Lat, James Lat, Chris Meekins, Chris Meekins, Ivan Misra, Ivan Misra, Mark Russin, Mark Russin, Craig Taborn, Craig Taborn, Larry Tolley, Larry Tolley	Panel-114 "I HAVE MY FRIENDS" Panel-115 "I LOVE IT" Selecting UCD Methods that Maximize Benefits and Minimize Project Risks Nigel Bevan	Panel-116 "I AM A JEDI" From Discourse-based Models to UIs Automatically Optimized for Your Smartphone Hermann Kalndl 1206	Panel-117 "I AM A YODA" Agile User Experience and UCD William Hudson 1207	Panel-118 "I AM A LUKE SKYWALKER" INTERACTING WITH NEW INTERFACES From Discourse-based Models to UIs Automatically Optimized for Your Smartphone Hermann Kalndl 1206	Panel-119 "I AM A DARTH VADER" INTERACTIONS BEYOND THE DISNEY FROM Discourse-based Models to UIs Automatically Optimized for Your Smartphone Hermann Kalndl 1206	Panel-120 "I AM A CHOCOLATE CHIP COOKIES" RIGHT WHERE I AM UX IN COMPLEX ENVIRONMENTS Panel-121 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1212	Panel-121 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1212	Panel-122 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1312	Panel-123 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1312	Panel-124 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1313	Panel-125 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1315	Panel-126 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316
11:30-12:50	Video 1301	1403 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1404 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1405 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1406 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1407 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1408 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1409 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1410 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1411 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1412 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1413 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1414 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1415 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1416 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	
14:30-15:50	Rehearsal X	1401 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1402 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1403 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1404 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1405 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1406 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1407 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1408 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1409 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1410 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1411 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1412 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1413 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	1414 "I AM A CHOCOLATE CHIP COOKIES" alt.chi 1316	

A CONFERENCE COMMUNITY

[HCOMP 2014]

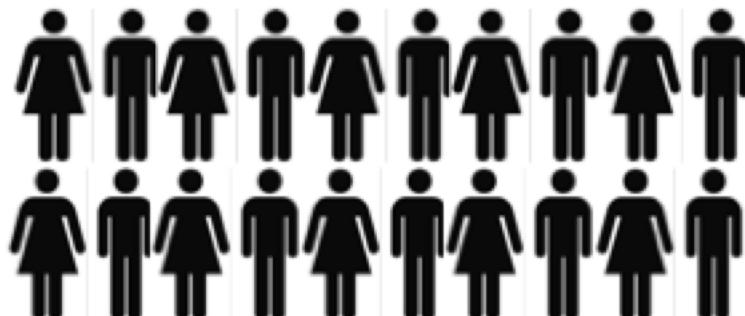
1. Conference Chairs (2)



2. PC Members (31)



3. Authors (50+)



4. Attendees (200+)



PAPER BASED PROCESS

Involved in the process

- ✓ Chairs / Organizers
- ✓ PC Members
- Authors
- Attendees

PRIOR WORK [COBI]

1. Committee-Sourcing

(type group name in generated textbox)

Drag paper into here to create new group

Unclustered

[Abs] Leaving the Wild: Lessons from Community Technology Handovers

[Abs] Designing Action-based Exergames for Children with Cerebral Palsy

2. Author-Sourcing

Your Paper: iPhone In Vivo: Video Analysis of Mobile Device Use

1. Tell us your name: (as it appears in the paper)

2. We've identified 10 papers that may be similar to yours.

Tell us how they would fit in a session with your paper:

Delivering Patients to Sacre Coeur: Collective Intelligence in Digital Volunteer Communities [\[abstract\]](#)

Great in same session

Okay in same session

Not sure if it should be in same session

Should not be in same session

3. Of the papers and sessions below, check the ones you'd personally like to attend.
We will try our best not to schedule them in conflict with your session.

Delivering Patients to Sacre Coeur: Collective Intelligence in Digital Volunteer Communities [\[abstract\]](#)

3. Scheduling Interface

Touch	Social Impact Award	Shopping and Tagging	Place meets Engagement	Authentication	Automated Usability / Evaluation	Reflection and Evaluation
-5 ■ -5 ■ -1		-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	
Haptics	Colaborative Technology: I share, you	Pointing and Fitts Law	Studies of the Use of Digital	unused session 1	Evaluation Methods 2	Blindness and Design
-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	-4 ■ -4 ■ -1		-4 ■ -4 ■ -1	-4 ■ -4 ■ -1
Fabrication	Search and Find	Mobile keyboard / text entry	Hedonism, narrative, materiality &	Consent and Integrity	Novel Programming	Desing in a Psychiatric Setting
-2 ■ -1 ■ -1 ■ -2	+2 ■ +2 ■ -1	+2 ■ +2 ■ -1	+2 ■ +2 ■ -1	+2 ■ +2 ■ -1		+2 ■ +2 ■ -1
Touch, Tangibles, Touch	Mobiles and more	Mobile 1: Mobile Phones	Case Studies in the wild	Privacy	Nature and Nurture	ICT4D
-4 ■ -4 ■ -1	-4 ■ -4 ■ -1	-6 ■ -3 ■ -3 ■ -1		-7 ■ -4 ■ -3 ■ -1		-4 ■ -4 ■ -1

Involved in the process

- ✓ Chairs / Organizers
- ✓ PC Members
- ✓ Authors [partially]
- ✓ Attendees

Your Paper: iPhone In Vivo: Video Analysis of Mobile Device Use

1. Tell us your name: (as it appears in the paper)

2. We've identified 10 papers that may be similar to yours.

Tell us how they would fit in a session with your paper:

Delivering Patients to Sacre Coeur: Collective Intelligence in Digital Volunteer Communities [\[abstract\]](#)

- Great in same session
- Okay in same session
- Not sure if it should be in same session
- Should not be in same session

3. Of the papers and sessions below, check the ones you'd personally like to attend.

We will try our best not to schedule them in conflict with your session.

Delivering Patients to Sacre Coeur: Collective Intelligence in Digital Volunteer Communities [\[abstract\]](#)

Research Question: Is there any benefit involving attendees in the process?

ATTENDEE-SOURCING

Involve attendees -- collect useful data from attendees to help in conference scheduling.

CAVEAT

- Attendees have no interest/incentive in helping in conference scheduling

PROPOSED SOLUTION

- Give attendees a tool that they **use for their own benefits** and we collect useful data as a by-product of their usage of the tool.

INTRODUCING CONFER [A TOOL FOR ATTENDEE-SOURCING]

Confer helps attendees find/explore interesting papers and build a personal schedule.

confer

Anant Log Out

Confer helps you build a personal schedule for conferences you are attending. It helps you decide where to spend your time by providing social recommendations based on your interests.

Recently Added Conferences

KDD 2014 – The 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining

Aug. 24, 2014 – Aug. 27, 2014 New York, US



KDD 2014, a premier interdisciplinary conference, brings together researchers and practitioners from data science, data mining, knowledge discovery, large-scale data analytics, and big data. KDD 2014 features 5 keynotes, 151 Research Track papers, 44 Industry & Government Track papers and 8 invited talks, 12 tutorials, 25 workshops including the KDD Cup challenge, the Broadening Participation in Data Mining program, and more! Data Mining for Social Good is this year's special theme, highlighting work that contributes to social good.

[Browse](#)

DIS 2014 – The ACM conference on Designing Interactive Systems (DIS)

June 21, 2014 – June 25, 2014 Vancouver, Canada



The ACM conference on Designing Interactive Systems is the premier, international arena where designers, artists, psychologists, user experience researchers, systems engineers & many more debate & shape the future of interactive systems design & practice.

[Browse](#)

CHI 2014 – ACM CHI Conference on Human Factors in Computing Systems

April 26, 2014 – May 1, 2014 Toronto, Canada



The ACM CHI Conference on Human Factors in Computing Systems is the premier international conference of Human-Computer Interaction. CHI 2014 is a celebration of the conference's one of a kind diversity; from the broad range of backgrounds of its attendees, to the diverse spectrum of communities and fields which the conference and its research have an impact on. CHI 2014 will take place at the Metro Toronto Convention Centre in Toronto, Canada, a city itself known for its one of a kind cultural diversity.

[Browse](#)

WSDM 2014 – The 7th ACM International Conference on Web Search and Data Mining

Feb. 24, 2014 – Feb. 28, 2014 New York, USA



WSDM (pronounced "wisdom") is the premier international ACM conference covering research in the areas of search and data mining on the Web. The Seventh ACM WSDM Conference will take place in New York City, during February 24–28, 2014. WSDM publishes original, high quality papers and presentations related to search and data mining on the Web and the Social Web, with an emphasis on practical but principled novel models of search, retrieval and data mining, algorithm design and analysis, economic implications, and in-depth experimental analysis of accuracy and performance.

[Browse](#)

CSCW 2014 – The 17th ACM Conference on Computer Supported Cooperative Work and Social Computing

Feb. 15, 2014 – Feb. 19, 2014 Baltimore, Maryland, USA



CSCW is the premier venue for presenting research in the design and use of technologies that affect groups, organizations, communities, and networks. Bringing together top researchers and practitioners from academia and industry in the area of social computing, CSCW encompasses both the technical and social challenges encountered when supporting collaboration.

[Browse](#)

ATTENDEES SEARCH ON CONFER

[Anant](#)[My Papers](#)[My Schedule](#)[My Meetups](#)[Log Out](#)

Tag papers you want to see and get social recommendations of other papers you may like. The recommendations update automatically as you tag new papers. Just click "Show More" to see more!

▼ Papers you want to see (0)

▼ Papers recommended for you

[Refresh](#)

▼ All Papers (24)

Search:

Crowdsourcing the Future: Predictions Made with a Social Network – Paper

Clifton L Forlines Sarah Miller Leslie Guelcher Robert Bruzzi



Researchers have long known that aggregate estimations built from the collected opinions of a large group of people often outperform the estimations of individual experts. This phenomenon is generally described as the "Wisdom of Crowds." This approach has shown promise with respect to the task of accurately forecasting future events. Previous resea...

Social Network, aggregation, forecasting, crowd-sourcing, meta-forecast, Bayesian Truth Serum

Crowdsourcing Step-by-Step Information Extraction to Enhance Existing How-to Videos – Paper

Juho Kim Phu T Nguyen Sarah Weir Philip J Guo Robert C Miller Krzysztof Z Gajos



Millions of learners today use how-to videos to master new skills in a variety of domains. But browsing such videos is often tedious and inefficient because video player interfaces are not optimized for the unique step-by-step structure of such videos. This research aims to improve the learning experience of existing how-to videos with step-by-ste...

Crowdsourcing, how-to videos, video annotation.

Twitch Crowdsourcing: Crowd Contributions in Short Bursts of Time – Paper

ATTENDEES MARK INTERESTING PAPERS

▼ All Papers (24)

Search:

Crowdsourcing the Future: Predictions Made with a Social Network – Paper



Clifton L Forlines Sarah Miller Leslie Guelcher Robert Bruzzi

Researchers have long known that aggregate estimations built from the collected opinions of a large group of people often outperform the estimations of individual experts. This phenomenon is generally described as the "Wisdom of Crowds." This approach has shown promise with respect to the task of accurately forecasting future events. Previous resea...

Social Network, aggregation, forecasting, crowd-sourcing, meta-forecast, Bayesian Truth Serum

Crowdsourcing Step-by-Step Information Extraction to Enhance Existing How-to Videos – Paper



Juho Kim Phu T Nguyen Sarah Weir Philip J Guo Robert C Miller Krzysztof Z Gajos



Millions of learners today use how-to videos to master new skills in a variety of domains. But browsing such videos is often tedious and inefficient because video player interfaces are not optimized for the unique step-by-step structure of such videos. This research aims to improve the learning experience of existing how-to videos with step-by-ste...

Crowdsourcing, how-to videos, video annotation.

Twitch Crowdsourcing: Crowd Contributions in Short Bursts of Time – Paper



Rajan Vaish Keith Wyngarden Jingshu Chen Brandon Cheung Michael S Bernstein

To lower the threshold to participation in crowdsourcing, we present twitch crowdsourcing: crowdsourcing via quick contributions that can be completed in one or two seconds. We introduce Twitch, a mobile phone application that asks users to make a micro-contribution each time they unlock their phone. Twitch takes advantage of the common habit of tu...

Crowdsourcing, microtasking, mobile crowdsourcing

Opportunities for Odor: Experiences with Smell and Implications for Technology – Paper



Marianna Obrist Alexandre N Tuch Kasper Hornbaek

Technologies for capturing and generating smell are emerging, and our ability to engineer such technologies and use them in HCI is rapidly developing. Our understanding of how these technologies match the experiences with smell that people have or want to have is surprisingly limited. We therefore investigated the experience of smell and the emotio...

Smell, smell experiences, odor, olfaction, user experience, smell-enhanced technology, narratives, smell stories, crowdsourcing, design brainstorming, designing for smell.

ATTENDEES EXPLORE

Crowdsourcing Step-by-Step Information Extraction to Enhance Existing How-to Videos -- Paper

Juho Kim CSAIL, Massachusetts Institute of Technology, Cambridge, United States
Phu T Nguyen CSAIL, Massachusetts Institute of Technology, Cambridge, United States
Sarah Weir CSAIL, Massachusetts Institute of Technology, Cambridge, United States
Philip J Guo University of Rochester, Rochester, United States
Robert C Miller CSAIL, Massachusetts Institute of Technology, Cambridge, United States
Krzysztof Z Gajos SEAS, Harvard University, Cambridge, United States



Millions of learners today use how-to videos to master new skills in a variety of domains. But browsing such videos is often tedious and inefficient because video player interfaces are not optimized for the unique step-by-step structure of such videos. This research aims to improve the learning experience of existing how-to videos with step-by-step annotations. We first performed a formative study to verify that annotations are actually useful to learners. We created ToolScape, an interactive video player that displays step descriptions and intermediate result thumbnails in the video timeline. Learners in our study performed better and gained more self-efficacy using ToolScape versus a traditional video player. To add the needed step annotations to existing how-to videos at scale, we introduce a novel crowdsourcing workflow. It extracts step-by-step structure from an existing video, including step times, descriptions, and before and after images. We introduce the Find-Verify-Expand design pattern for temporal and visual annotation, which applies clustering, text processing, and visual analysis algorithms to merge crowd output. The workflow does not rely on domain-specific customization, works on top of existing videos, and recruits untrained crowd workers. We evaluated the workflow with Mechanical Turk, using 75 cooking, makeup, and Photoshop videos on YouTube. Results show that our workflow can extract steps with a quality comparable to that of trained annotators across all three domains with 77% precision and 81% recall.

Crowdsourcing, how-to videos, video annotation.

▼ Papers similar to this paper:

Combining crowdsourcing and learning to improve engagement and performance – Paper



Mira Dontcheva Robert R Morris Joel R Brandt Elizabeth M Gerber

Crowdsourcing complex creative tasks remains difficult, in part because these tasks require skilled workers. Most crowdsourcing platforms do not help workers acquire the skills necessary to accomplish complex creative tasks. In this paper, we describe a platform that combines learning and crowdsourcing to benefit both the workers and the requesters...

Crowdsourcing, training, games

Cognitively Inspired Task Design to Improve User Performance on Crowdsourcing Platforms – Paper



Harini Alagarai Sampath Rajeev Rajeshuni Bipin Indurkha

Recent research in human computation has focused on improving the quality of work done by crowd workers on crowdsourcing platforms. Multiple approaches have been adopted like filtering crowd workers through qualification tasks, and aggregating responses from multiple crowd workers to obtain consensus. We investigate here how improving the presentat...

Crowdsourcing, Cognitive Psychology, Task Design, Visual Saliency, Working Memory, Mechanical Turk, Eye Tracking

CONFER RECOMMENDATIONS

▼ Papers you want to see (2)

Twitch Crowdsourcing: Crowd Contributions in Short Bursts of Time – Paper

Rajan Vaish Keith Wyngarden Jingshu Chen Brandon Cheung Michael S Bernstein



To lower the threshold to participation in crowdsourcing, we present twitch crowdsourcing: crowdsourcing via quick contributions that can be completed in one or two seconds. We introduce Twitch, a mobile phone application that asks users to make a micro-contribution each time they unlock their phone. Twitch takes advantage of the common habit of tu...

Crowdsourcing, microtasking, mobile crowdsourcing

Crowdsourcing Step-by-Step Information Extraction to Enhance Existing How-to Videos – Paper

Juho Kim Phu T Nguyen Sarah Weir Philip J Guo Robert C Miller Krzysztof Z Gajos



Millions of learners today use how-to videos to master new skills in a variety of domains. But browsing such videos is often tedious and inefficient because video player interfaces are not optimized for the unique step-by-step structure of such videos. This research aims to improve the learning experience of existing how-to videos with step-by-ste...

Crowdsourcing, how-to videos, video annotation.

▼ Papers recommended for you

Refresh

Combining crowdsourcing and learning to improve engagement and performance – Paper

Mira Dontcheva Robert R Morris Joel R Brandt Elizabeth M Gerber



recommended

Crowdsourcing complex creative tasks remains difficult, in part because these tasks require skilled workers. Most crowdsourcing platforms do not help workers acquire the skills necessary to accomplish complex creative tasks. In this paper, we describe a platform that combines learning and crowdsourcing to benefit both the workers and the requesters...

Crowdsourcing, training, games

Cognitively Inspired Task Design to Improve User Performance on Crowdsourcing Platforms – Paper

Harini Alagarai Sampath Rajeev Rajeshuni Bipin Indurkhy



recommended

Recent research in human computation has focused on improving the quality of work done by crowd workers on crowdsourcing platforms. Multiple approaches have been adopted like filtering crowd workers through qualification tasks, and aggregating responses from multiple crowd workers to obtain consensus. We investigate here how improving the presentat...

Crowdsourcing, Cognitive Psychology, Task Design, Visual Saliency, Working Memory, Mechanical Turk, Eye Tracking

PERSONALIZED SCHEDULE



Anant

My Papers

My Schedule

My Meetups

Log Out

Tag sessions and papers you want to see and get updated recommendations on the fly. Use your likes, recommendations, and other filtering options to discover your personal schedule.

Sessions [All](#) [Liked](#) [Liked + Recommended](#) [Award + Nominated](#)

Day [All](#) [Monday](#) [Tuesday](#) [Wednesday](#) [Thursday](#)

Time [All](#) [Early Morning](#) [Late Morning](#) [Early Afternoon](#) [Late Afternoon](#)

Search:

Showing 10 sessions

▼ Thursday, 9:00 – 10:20

▶ **Persuasive Technologies and Applications** – paper



recommended

Room: 716B Chair: Erin Cherry

▶ **HCI Paradigms: Past, Present and Future** – paper



recommended

Room: 801A Chair: Jeffrey Bardzell

▼ Thursday, 11:00 – 12:20

▶ **Crowdsourcing** – paper



Room: 701B Chair: Steven P Dow

▶ **Communicating User Research in Order to Drive Design and Product Decisions** – SIG



recommended

Room: 715A

ATTENDEE-SOURCING

Collect useful data from attendees to help in conference scheduling.

PROPOSAL

- Use Confer to collect useful data from attendees.

CAVEAT

- Why would attendee mark papers months in advance to help in conference scheduling?

PRIOR KNOWLEDGE

Based on Past Deployments of Confer

- Attendees start using Confer immediately once the conference is available on Confer
- They search for papers and explore related papers
- While exploring, they add interesting papers to their preference list.

ATTENDEE-SOURCING

60-90
days
before
the
schedule
announce-
ment.

No
Schedule

 CHI 2014
One of a CHind

Anant My Papers My Meetups Log Out

Tag papers you want to see and get social recommendations of other papers you may like. The recommendations update automatically as you tag new papers. Just click "Show More" to see more!

▼ Papers you want to see (0)

▼ Papers recommended for you Refresh

▼ All Papers (587)

Search:

Communicating User Research in Order to Drive Design and Product Decisions – SIG
 **Karen Holtzblatt Shoshana Holtzblatt**
As the industry evolved from engineering-centered design to user-centered design, organizations created new roles. These user experience (UX) roles are charged with conducting user studies, synthesizing data collected, and communicating findings to product managers, engineers, and UI designers. While it's generally accepted that user research shoul...
User-centered design, user studies, user research analysis and representation, requirements gathering and specifications

Interaction Science SIG: Overcoming Challenges – SIG
 **Andrew Howes Benjamin Cowan Christian Janssen Anna Cox Paul Cairns Anthony Hornof Stephen Payne Peter Pirolli**
Over the past 30 years science has played a key role in shaping and advancing research in Human-Computer Interaction. Informed in part by methods, theories and findings from the behavioral sciences and from computer science, scientific contributions to HCI have provided explanations of how and why people interact through and with technology. We ar...
science, theory, modeling, scientific method, empirical method, experiments, data, evidence, analysis, behavioral sciences, interaction science

Jogging with Technology: Interaction Design Supporting Sport Activities – SIG
 **Florian Mueller Joe Marshall Rohit Khot Stina Nylander Jakob Tholander**
There has been a significant increase of interactive technologies to support sports activities. Examples are heart rate monitors for cyclists, jogging apps on mobile phones and GPS sports watches for extreme sports. Despite consumer popularity, there is little knowledge about how they should be designed in order to support the exertion activity. Ba...
Sports, exercise, exertion interface

ADVERTISE! ADVERTISE!

 **ACM SIGCHI** @sig_chi · Jan 27

Seen the full list of #chi2014 papers? You can search & star ones you want to see, and start planning for Toronto! confer.csail.mit.edu/chi2014/papers

[Collapse](#) [Reply](#) [Retweet](#) [Favorite](#) [More](#)

RETWEETS 7	FAVORITES 3	
---------------	----------------	--

11:55 PM - 27 Jan 2014 · [Details](#)

 **ACM SIGCHI** @sig_chi · Jan 29

Did you know? The papers you 'star' to see, will help #chi2014 to determine optimal sessions. confer.csail.mit.edu/chi2014/papers - Start starring!

[Collapse](#) [Reply](#) [Retweet](#) [Favorite](#) [More](#)

RETWEETS 4	
---------------	---

12:03 AM - 29 Jan 2014 · [Details](#)

RICH DATA (4 MONTHS IN ADVANCE)



Shaun Lawson @shaunlawson · Jan 26

Yikes. so far I have tagged 55 papers that I "want to see" on the **#chi2014** Confer site confer.csail.mit.edu/chi2014/papers

[Collapse](#)

[Reply](#) [Retweet](#) [Favorite](#) [More](#)

8:09 PM - 26 Jan 2014 · [Details](#)

[Reply to @shaunlawson](#)



John Vines @almostjohnvines · Jan 29

Hmmmm. It's probably quite unlikely I'll get around to seeing all 71 of the **#chi2014** papers I've starred... confer.csail.mit.edu/chi2014/papers

4:54 AM - 29 Jan 2014 · [Details](#)

[Reply to @almostjohnvines](#)

RESEARCH QUESTION

Given that Cobi already collects preferences from authors, is there any benefit doing attendee-sourcing?

COBI VS. CONFER

- **Attendees want to see more papers**
 - Confer (*mean*: 20.83, *std-dev*: 21.47, *median*: 14)
 - Cobi (*mean*: 6.1, *std-dev*: 3.86, *median*: 5)
- **Confer provides more coverage.**
 - Confer (98.98%)
 - Cobi (91.14%)
- **Confer generates more preference data points, with less participation.**
 - Confer (327 attendees: 7,228 preferences)
 - Cobi (634 authors: 3869 preferences)

PAPER SIMILARITY CAPTURE

0 pair

- Confer: Strong Similarity.
- Cobi: Weak or No Similarity

402 pairs:

- Confer: Weak Similarity
- Cobi: Strong Similarity.

150 pairs:

- Confer: No Similarity (missed)
- Cobi: Strong Similarity (discovered).

NATURE OF DATA

- **Cobi validates similarity**
 - High precision (cost: misses a lot on recall)
- **Confer discovers similarity**
 - High recall (cost: some false positives)

POTENTIAL BIASES

Author-Sourcing:

- personal biases: my paper in a good session

Attendee-Sourcing

- by-product of a natural exploration by attendees.
- possible bias: social media, popularity

CHI 2014 [CONFER + COBI]

CHI 2014 used data collected from both Cobi & Confer

- **Creating Sessions**
 - a set of papers a lot of attendees want to see - same session.
- **Reducing Conflicts.**
 - papers many attendees want to see: don't schedule at the same time

CONFER + COBI

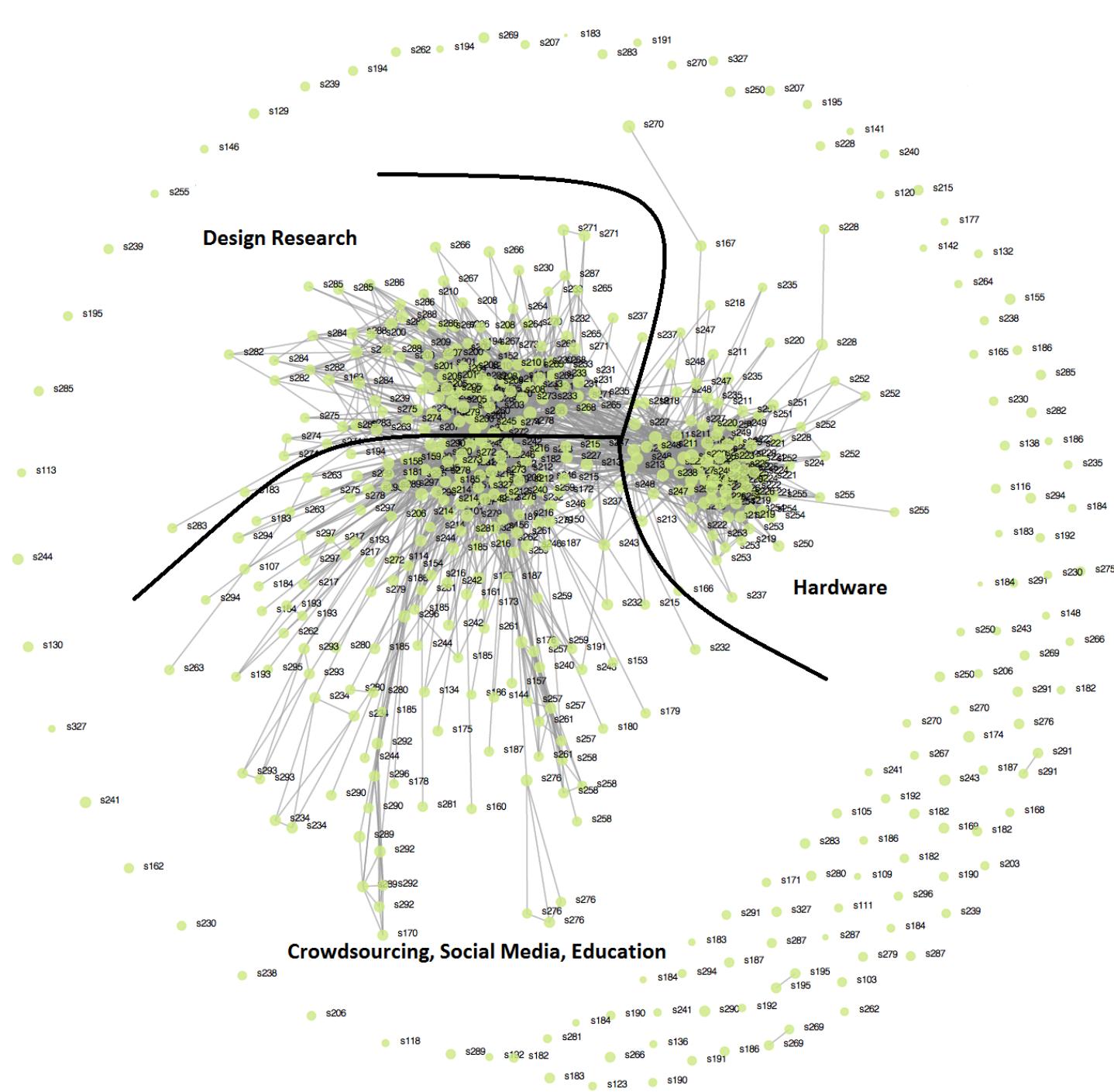
- The data from Confer & Cobi complement each other.
- **Confer + Cobi**
 - ✓ Chairs / Organizers
 - ✓ PC Members
 - ✓ Authors
 - ✓ Attendees

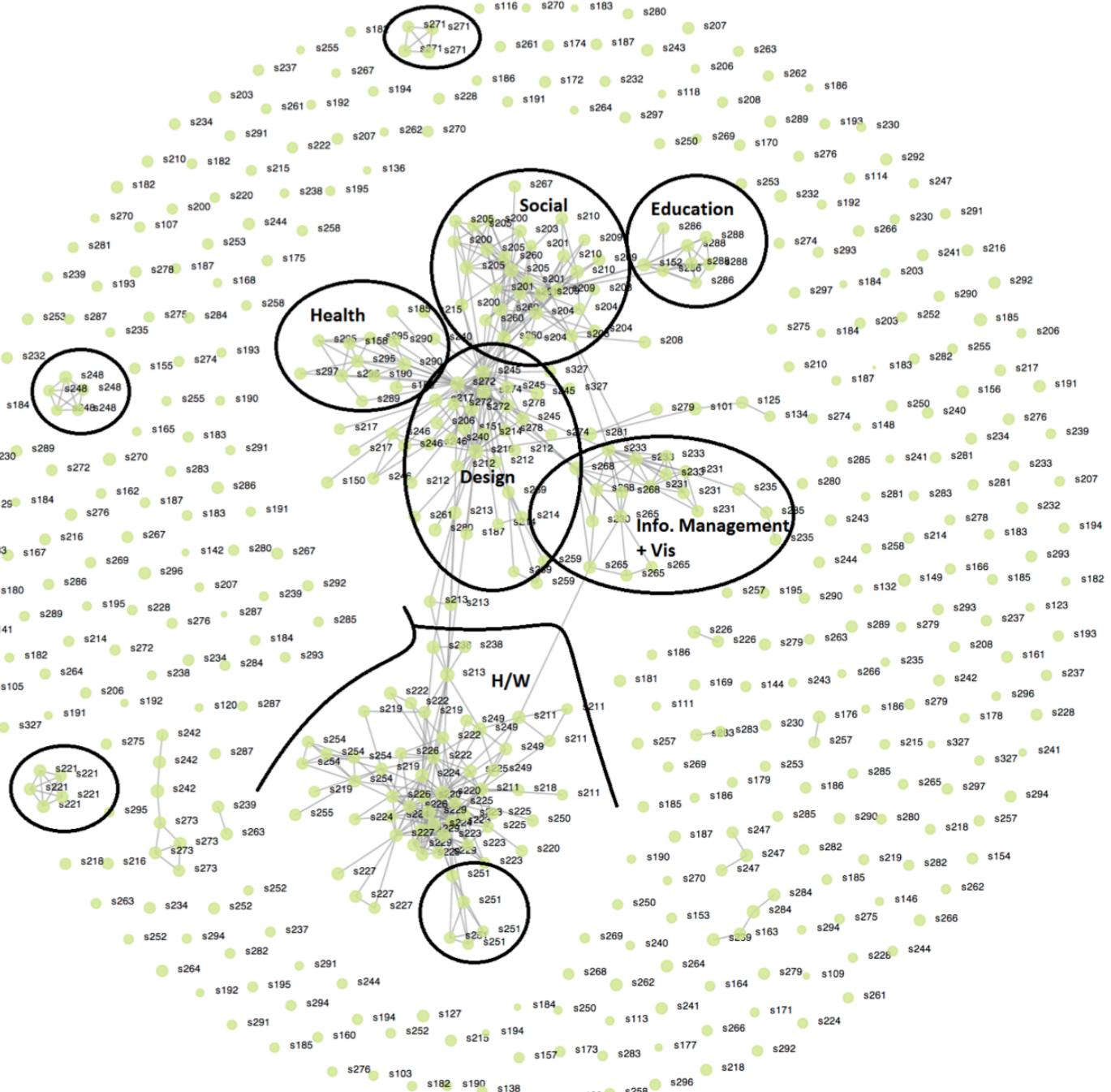
TAKEAWAYS

- There is value in engaging all the community members
- Different incentives, methods, and interfaces are needed for collecting data from different layers of a community.
- Members with different roles and incentives produce data of different nature

CONFER: BEYOND SCHEDULING

- **Rooms**
 - put popular papers in bigger rooms
- **Keynote speakers, panels, workshops, etc.**
- **Understand trends, community network, etc.**





SUMMARY

RESEARCH

- A design-space (incentive & interface design) exploration of how to collect inputs from members with different roles in a community for solving real-world problems
- A case study of collecting inputs from conference attendees for conference-scheduling

TAKEAWAYS

- Different incentives, methods, and interfaces are needed for collecting data from different layers of a community.
- Members with different roles and incentives produce data of different nature