# CrowdCamp 2013

## Rapidly Iterating Crowd Ideas

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## Abstract

The rapidly growing field of collective intelligence – encompassing aspects of crowdsourcing, human computation, and social computing – is having a tremendous impact on the way we work, live, and play. Building on the success of a CHI CrowdCamp, we propose a hands-on event that takes the main benefits of a workshop – provocative discussion and community building – and allows time to focus on developing ideas into concrete outputs: in-depth thoughts on hard problems, paper or coded prototypes, and particularly for CSCW, experiment design and data mining. We will bring together researchers to discuss future visions and make tangible headway on those visions, as well as seeding collaboration. The outputs from discussion, brainstorming, and building will persist after the workshop for attendees and the community to view.

## Keywords

crowdsourcing, human computation, social computing, prototype, data mining, workshop

## Topic and Rationale

The field of collective intelligence—encompassing aspects of human computation, crowdsourcing, and social computing—is having tremendous impact on how we work, live, and play.  We are building history's

largest encyclopedia in a collective community and digitizing all of the books in the world with the use of the crowd [2]. We are studying and building systems to better understand participation and interaction, and push the boundaries of what is possible in these fast-growing areas. To effectively do so, we draw from diverse disciplines including computer science, business, economics, psychology, and design. Yet few opportunities exist to form the interdisciplinary teams necessary for this work and to rapidly discuss and test new ideas. This proposal addresses this challenge.

We propose a 2-day collaborative workshop with an emphasis on ideation, prototyping and community building. Participants will work in teams of 3 to 6 to analyze data, build prototypes, test designs, and even deploy systems. We hope to bring together a diverse set of researchers, expose them to a broad range of ideas, actively engage them in starting a project, and sow the seeds for future collaboration.

We aim to attract researchers who:

- Study platforms and projects to understand motivation and participation

- Experiment with mechanisms for increased engagement or quality

- Build innovative systems *for* crowds (friends, or communities) or powered *by* crowds

The CSCW conference provides an ideal opportunity to gather both system studiers and builders at a convenient time and place. Initial discussions will provide an overview of the field and attendees will be invited to express future visions, propose ideas they might like to pursue but need collaborators for, even

bring a dataset or initial findings for collaborative analysis.

We anticipate considerable interest in this workshop from the CSCW community and beyond. The CHI 2012 CrowdCamp was highly selective and had 40 participants, with attendance by computer scientists, management scholars, psychologists, and designers - from industry and academia. The outputs included two papers submitted to CSCW 2013, blog posts, and continued collaboration.

*Lessons Learnt from CHI*
This workshop builds on and extends a CrowdCamp at CHI 2012. The workshop was successful in engaging a diverse group and producing satisfied participants and tangible outputs, and we also learnt a lot about process. The idea submission and discussion pre-workshop will be extended to refine ideas and interest, and those specific ideas will be represented in the workshop to ground initial discussion. We will also add a pre-workshop dinner the night before, allow for more time spent on structured feedback during the workshop, and limit attendance to 35 people to ensure that everyone can interact meaningfully with the rest of the attendees. Specifically for CSCW, we are emphasizing experiment design and data analysis topics related to computer-supported cooperative work.

## WORKSHOP PLAN
### Preparatory Activities
We will select participants based on ideas they wish to pursue, skillsets, collaboration style, and potential impact of the work to influence the world. Additionally, we will select participants based on their demonstrated interest in working on a collaborative research team. We will aim for diversity of interests and future visions.

Depending on the number of submissions, we may publicly display initial ideas and ask participants to comment or iterate on proposals. In order to forge a deep tie to research issues, we will highlight themes of:

- Integrating social media and crowdsourcing into our everyday work tasks
- Moving crowdsourcing to 'higher order' cognition, i.e., more complex and creative work tasks
- Challenges and opportunities of programming work within a crowd

**Workshop Day One**
*Rotating Introductions.* In rotating groups of 3, participants will introduce themselves, their skillset, and the idea or topic they are most passionate about.

*Brainstorming.* Based on the submitted and discussed ideas, we will form groups by topic, rotating once to encourage social interaction and spreading of ideas.

*Project Listing.* We will list brainstormed areas and projects and ask people to denote their interest. Final grouping or merging of projects will be dependent on number of participants and ideas, but to optimize interaction and work done we aim for groups of five.

*Work Commences!* After lunch, day one will be dedicated group time to get to know team members and flesh out project ideas, then start work on the project. Deliverables might include in-depth analyses, experiment designs, or a (paper or coded) prototype.

*Dinner.* The day will end with an informal dinner.

**Workshop Day Two**
*Team Work.* The majority of the day will be spent engaged in discussion or building. The goal will be to complete a first 'hack' of their idea by the end of the workshop. This might mean code for general purpose (real-time visualization of tasks) or for specific questions (does quality of spelling correlate with quality of programming on StackOverflow?); an experimental framework (application of management or creative ideation principles to crowd work); or an analytic framework.

*Feedback.* Throughout the day, there will be explicit times for informal feedback on projects.

*Presentation and Discussion.* At the end of the day, each group will present their work, with opportunity for critique and discussion. We will set up collaboration structures for groups to continue working after CHI. Our goal is for several of the projects from the CrowdCamp to continue progressing and eventually become future CSCW papers.

**Follow Up and Dissemination**
We will make available demonstrations or datasets worked on, collate these and brainstormed ideas and discussions into a special feature in Interactions or XRDS, and encourage reflections from participants at the crowdresearch.org blog.

**Authorship and IRB**
To encourage people to contribute broadly and keep ideas flowing freely we will hold a discussion of authorship and credit, perhaps suggesting a model of group authorship used by the Polymath project [1].

The activities done during the workshop are intended to be pilots and prototypes, which do not require IRB approval at most schools. Therefore, we do not anticipate any projects needing IRB approval.

Additionally, many researchers already have IRB approval for broad range of crowdsourcing-based experiments. Participants are encouraged to continue their projects and obtain IRB approval, if applicable.

## ORGANIZERS

The workshop organizers are active researchers in social and human computation, and collectively have multiple CSCW publications and experience organizing and facilitating hackathons and research workshops.

**Paul André** is a postdoctoral fellow at Carnegie Mellon University, working on mechanisms for complex and creative crowdsourcing. He has recently co-authored ICWSM'11 Best Paper, CSCW'12 Honorable Mention, with work featured in The Atlantic, TIME, Harvard Business Review, and others.

**Jeffrey Bigham** is an Assistant Professor of Computer Science at the University of Rochester where he heads the ROC HCI Group. His work is at the intersection of human-computer interaction, human computation, and artificial intelligence, with a focus on developing innovative technology that serves people with disabilities in their everyday lives.

**Lydia Chilton** is a third year PhD student at University of Washington. She was a co-author of the TurKit Toolkit for Iterative Mechanical Turk workflows, has done work on web search and task search in Mechanical Turk. She currently focuses on designing complex workflows such as crowd-created categorizations and summaries of large corpuses of free-text responses.

**Mira Dontcheva** is a Senior Research Scientist at Adobe Systems. Her research focuses on end-user programming, learning and creativity. Mira received her Ph.D. in computer science from University of Washington.

**Elizabeth Gerber** is an Assistant Professor of Mechanical Engineering at the Segal Design Institute and Communication Studies at Northwestern University, and the faculty founder of Design for America. Her research investigates the role of technology in creativity and innovation. She received her Ph.D. in Management Science and Engineering from Stanford University.

**Eric Gilbert** is an Assistant Professor in the School of Interactive Computing at Georgia Tech. His research focuses on exploring large social datasets and on building new social media systems. He received his Ph.D. in computer science from the University of Illinois at Urbana-Champaign.

## REFERENCES

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