Call for Participation - HCIC 2019

The Futures of Work

Location: Pajaro Dunes, Watsonville, CA
Dates: 23–27 June 2019

Work and technology are inextricably interlinked, so advances in technology drive changes in work and vice versa. Information technology is particularly potent as a force for change as it supports knowledge work, an important component of nearly every kind of work nowadays. And importantly, the capability of information technology (computation, storage, transmission) has been improving at an exponential rate.

However, while information technologies are becoming ever more capable, people and organizations change more slowly, if at all. The result is an “impedance mismatch”—between the technologies and the organizational and individual abilities to put technologies to use—that risks unexpected or undesired consequences of technology use (e.g., deskilling, overly fragile systems or automation surprises).

To address the challenge of understanding and proactively designing work with novel technologies requires expanding from a focus on technical systems and their potential for action to a focus on system design as a sociotechnical problem. Such systems require the joint design of the social and technical systems and attention to the implications of their interdependencies, a tradition at the heart of HCI. But at present, we lack deep and systematic knowledge about how to design work that makes best use of expanding technological capabilities.

Much of the rhetoric around work and information technology focuses on only one side of the equation or the other, and even these discussions are often dominated by a single perspective. For example, discussions of the future of work are largely consumed by an economic analysis of the possibilities of people being put out of work by automation, and possible policy solutions to that problem. And on the other hand, discussions of technology are too often driven by the technical challenges, with little attention to how the systems will work with people. HCI researchers seem perfectly poised to span this gap, but have so far been mostly absent from the discussion of the future of work.

What does HCI have to say about the future of work? What is our contribution? Can HCI research take the lead on designing new kinds of work rather than just reacting to changing conditions?

For HCIC 2019, we would like to have a dialog around the future of work and HCI’s point of view and leadership role. We ask you to consider the design process itself, whether existing methods can support the investigation of this topic, technical challenges and opportunities, psychological implications, as well as social, economic, and cultural issues. For the purposes of this CFP, we

adopt the definition of work from a recent NSF solicitation: “mental or physical activity to achieve tangible benefit such as income, profit, or community welfare” (NSF 19-541).

Possible topics to consider

Technology and jobs

What happens to people’s jobs (e.g., constitutive tasks and working conditions) when part of what they used to do is done by someone or something else? If an AI system can read an X-ray as well or better than a radiologist, is this specialty still needed? And what does a former radiologist (or truck driver or stock trader) do next? Past technological revolutions have always created more new jobs than they destroyed, but perhaps this one will be different: after all, the automobile industry did not create jobs for horses. Furthermore, most people spend the majority of their waking time working and derive not only their income but their identity from their jobs; what will fill this role if the future of work is joblessness, utopian or not?

Technology and work relationships

What happens to people’s work lives when their work colleagues are intelligent assistants, social bots, virtual companions, non-human players, and so on versus people? What happens to work teams when part of the team is outsourced or automated? What happens to human relationships when people work on platforms, in isolation from colleagues? Does it hamper people’s ability to grow social networks? Does it matter that that their work may be invisible to colleagues (indeed, they might not even know who the colleagues are)? These impacts can happen even within an organization if it experiences frequent rearrangements or has an internal gig work platform to find workers for temporary tasks, like styling a website. On the other hand, people are finding ways outside platforms to connect; do these connections fill the gap?

Technology and careers

How do we create systems that understand jobs and careers, not just tasks? If you work at a distance and on gigs, how do you get mentored? Where do you go next? Can an Uber driver hope to become an Uber programmer when there’s no visibility or path to advancement? If automation can handle the tasks that used to comprise an entry-level job, how do people get started in a profession? If your boss is a robot, who writes you a recommendation when you decide to go to graduate school?

Technology and management

The changing nature of work has led from employees being managed by human employees to people being managed by algorithms, and this shift has fundamentally changed our view of control. Does algorithmic control lead to empowerment or enslavement? What are the policy implications for this change? Should government mediate? If so, how? What kinds of regulation are important in these settings? What is the role for unions in the future (and what do future unions look like)? What if corporations are software? What does this mean for corporate governance? As a specific example, the Equal Pay Act makes it illegal to pay men and women working in the same place doing similar work different salaries. Despite the Act, discrepancy in

pay continues, e.g., due to the choice of hours worked and wages requested. When computers make work and wages transparent, will the salary differences persist or change? What will be the societal implications? On the one hand computers can keep track; on the other hand, now that decision making is distributed across millions of people in a market created by an online platform, control can become a lot harder.

Paradoxes of technology at work

Technology is protean and so has simultaneous contradictory and perhaps paradoxical effects. For example, networking technologies are good because they enable people to work from anywhere; and are bad because they enable people to work from anywhere. We can respond to work emails on the subway, or organize birthday parties in bed; what is the consequence of constantly doing paid/unpaid work? Technologies are good because they make information easier to share and so increase transparency; and are bad because they make information too easy to share and so increase transparency. The openness of online systems reduces the influence of traditional gatekeepers, but gatekeepers often add value by filtering out noise. The promise of technology is to make our lives easier, e.g., laundry machines and electric irons were to reduce time cleaning clothes, just as computers were to reduce time communicating and yet, we find ourselves busier than ever.

Preparing the future workforce

Workplaces and work contexts are steadily evolving and changing. Soon, working alongside cyber-physical systems like robots and other intelligent machines and in virtual and/or changing environments will be the norm. Working in and adapting to such environments will lead to a changing workforce that will need to be (re)-trained. Both pre-employment education and on-the-job learning will become a top priority and need to change as well. How will these new technologies be introduced, adapted, and rejected in various business sectors? What are the necessary skills for people to have jobs in the future and how will people access these skills? How will the introduction of these new technologies support, enhance, or diminish social, economic, and community inequalities?

Methodology

As the nature of work changes, we (researchers) will need to assess whether our existing methods adequately allow us to evaluate the feasibility of future work conditions, working conditions alongside robots and other intelligent machines/technology, and worker morale. How do we study the future, which by definition hasn't happened and so is not yet accessible to observation? (Though as William Gibson observed, "The future is already here; it's just unevenly distributed.") Will new methods need to be created? Do we as researchers have the technology in place that will be needed to conduct these methods? Are there methods/approaches to understanding whether and under what conditions these new technologies will support, enhance, or diminish social, economic, and community inequalities?

Future visions

Considering all of the specific topics above, we want to know, how does it it all turn out? What does the future hold for work? How does HCI research help society pick from different futures? We welcome diverse formats for presentations that address the big question: e.g., surveys of alternative futures from science fiction, utopian, dystopian, and in between; speculative design fictions imaging the future; socratic dialogues; philosophical inquiries; and your own predictions and prognostications.

Submission Formats with Deadlines

We encourage provocative points of view that will foster lively deliberation. We invite proposals for the following three venues/formats for exploration of these topics: presentations, demos, and "poster-boasters", but keep in mind that we are open to other formats such as debates, sketches, stories or role play (see demos below). All submissions should be sent to hcic-pc@googlegroups.com by the specified deadlines. For all categories of submission, please contact us if you would like to consult with us about your ideas in advance of submission.

Presentations

To propose a presentation, submit a pdf of a 2-3 page extended abstract discussing your idea. We invite challenging and provocative ideas. Controversial topics, fierce (but well argued) challenges, and thoughts on the future of work and HCI are strongly encouraged. The standard presentation format is a 45-minute talk followed by a 10-minute discussant response period, and then 35 minutes of open discussion. Topics should be appropriate for this format. Please submit an extended abstract in PDF form that includes:

1. A cover page with:
    a. Title
    b. Author(s) (please indicate those who will attend; note that the presenter can't be a student)
    c. At least three keywords
    d. A 150 word abstract
2. A 2-3 page extended abstract that describes your work and what you would like to present and discuss at HCIC 2019.

Submission deadline: March 16, 2019

Demos

To propose a demo, please submit a 2-3 page extended abstract with images/sketches detailing what the demo is, what it is intended to illustrate, and how people will interact with your demo. Your demo could be a technology, it could be a participatory game, it could be a participatory active improvisation, or it could be in the form of a scripted role play. It should, however, clearly illustrate the ways in which possible futures play a role in the future of work and HCI.

1. A cover page with:
    a. Title
    b. Author(s) (please indicate those who will present and those who will attend; note that the presenter can't be a student)
    c. At least three keywords
    d. A 150 word abstract
2. A 2-3 page description of your proposed demo including what the demo is intended to illustrate and how you intend people to interact with your demo. Please also specify A/V requirements for your demo. Note that wireless connectivity may be limited, so make sure your demo does not require an Internet connection.

Submission deadline: March 16, 2019

Boaster-Posters

A "boaster-poster" is a poster that describes your most current research endeavor and/or interest, not necessarily related to the workshop's theme. You can use images and text to frame and illustrate your ideas. The idea is to foster dialogue about your topic of interest/research so you can meet like-minded HCIC 2019 attendees. Boaster-posters offer an opportunity to showcase the work of new and experienced authors alike. We strongly encourage all student attendees to submit a boaster to HCIC, as boaster authors will have opportunities across the conference to discuss their work with other attendees.

The format for a "boaster-poster" submission is as follows: a short description of your perspective and interest in this area, plus a description of your work in form of a single page poster. A list with boaster-poster titles, authors & abstracts will be distributed at the conference, and the posters will be available for view at the HCIC conference (bring an 18" x 24" portrait format poster).

Please send your submission in PDF form and include the following:

1. Cover page with:
    a. Title
    b. Author(s) (indicate those available to chat at meeting; students ok)
    c. At least three keywords
    d. A 150 word abstract
2. A draft of your poster (one page)

Submission deadline: June 8, 2019

All boaster-posters are automatically accepted. There is no review process.

HCIC Rules

The rules of the consortium state that only employees of member organizations may submit abstracts for this call. Abstracts may have non-member coauthors, but you will need to check with the HCIC chairs and PC board to approve attendance or co-presentation. Students are not eligible to submit proposals for presentations or demos. However, they are strongly encouraged to submit “boaster-posters,” short descriptions of their interests and current work in the form of single page posters.

Registration

Registration opens in mid-April. To register for HCIC please go to the HCIC website: hcic.org. For more details on registration email hcicmail@umn.edu.

Logistics

For more information see our website (hcic.org). For all logistics questions related to HCIC, please email hcic-chairs@googlegroups.com

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