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# The 2016 U.S. Election and HCI: Towards a Research Agenda

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**Abstract**

This panel brings together senior and junior members of the HCI community to answer two questions: (1) What issues raised by the 2016 U.S. election need to be addressed by the HCI community? and (2) How can the HCI community address these issues and have *real, substantive impact*? The panel includes a novel audience participation component that seeks to ensure maximum coverage of the HCI community's many diverse perspectives on these two questions.

**Author Keywords**

U.S. presidential election, policy, research agenda formation

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

**Introduction**

The 2016 U.S. election has surfaced a litany of critical issues with deep relevance to the HCI community. From “fake news” to online extremism and harassment to usable security, the election made clear more than ever that human-computer interaction is a defining issue of our time.

The importance of HCI to the social welfare of the United States (and countries around the world) presents the SIGCHI community with both an

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opportunity and a responsibility to use our craft, our energy, and our time to benefit society. The many discussions online among SIGCHI members following the election and in-person at the CHI 2017 PC meeting highlighted a desire to do more to seize this opportunity. These discussions also reflected a feeling that we may be abdicating some of our responsibility by over-focusing on older or smaller problems and, critically, not doing enough research that can have real impact.

The goal of this panel is to help define a concrete HCI research agenda to address issues that have emerged during the 2016 U.S. campaign and the early period of the new administration. As discussed below, our panelists will both highlight new research directions as well as suggest new emphases within existing research areas. In addition to discussion, we also hope that our panel will inspire incipient action, and we have taken steps in our panel design to support this.

Major global events - especially those associated with politics - often inspire dissociative conversations whose utility can be more limited than its participants would like. To focus our panel's attention, the panel will closely revolve around two questions:

- **Question #1:** What issues raised by the 2016 U.S. election need to be addressed by the HCI community?
- **Question #2:** How can the HCI community address these issues and have *real, substantive impact*?

In their presentations, panelists will be asked to restrict their remarks to answers to these two questions. In

addition, as described below, audience involvement will be structured around these questions as well.

One active subject of discussion in our correspondence related to planning this panel was ensuring that panelists avoid “navel gazing” by simply highlighting the import of their existing work. As such, panelists will be explicitly encouraged to be as forward-thinking as possible. For instance, we expect that panelists will make statements that roughly correspond to the following templates (although certainly not limited to these templates):

- “An entirely new HCI problem that emerged from issues raised during the 2016 campaign is X...”
- “The election has really showed that research question X – on which there have been 2-3 papers – is way more important than we’ve been treating it. Here are three projects I’d like to see in this area...”
- “We’ve done a lot of descriptive work on X, but it has too limited impact. Here’s how I think we can move towards having a real impact.”

More generally, this panel will be about research questions motivated by concrete, empirically-grounded problems, not partisan politics. Panelists will be encouraged to redefine arguments away from those framed in terms of specific political parties and to instead use framings closely tied to the ultimate outcomes they seek to achieve (e.g. a specific technology, a specific right protected, a specific social good).

We also note that ACM and ACM SIGCHI have long engaged in national policy issues, especially through

the US Public Policy group (USACM). CHI conferences have also addressed troubling national issues in the past such as the 1992 Los Angeles riots [9, 10] and the September 11<sup>th</sup> attacks [8]. Considering the enormous impact of our research on vital technologies, such as email, social media, web-based services, and mobile devices, it is necessary that we consider how our work could constructively influence societies we live in.

Below, we provide additional detail about the panel participants, panel format, panel outcomes, and the topics that may be discussed.

### **Panel Participants**

Our panelists have been selected to provide diverse perspectives on our two questions in terms of areas of expertise, worldview, tenure in the community, and identity. Even with our set of panelists representing diverse perspectives across these dimensions, there will likely be a number of viewpoints not represented given the widespread relevance of the topic. To address this issue, this panel will include a non-traditional component: a “Call for Audience Participation”. Prior to the conference, we will advertise our two core questions and ask members of the HCI community to propose their own answers. The panel will select 5-10 of these answers using a joint interestingness-diversity criterion, and the audience members who proposed these answers will be asked to present their answers prior to open Q&A (if they choose; see below).

It is important to note that while the core set of panelists represent diverse political viewpoints, a limitation of this group is that we do not have any core panelists who identify as political conservatives. This demographic was very difficult from which to recruit, in

part due to a perceived cost to being the public face of “CHI conservatives”. The above “Call for Audience Participation” was initially motivated as a means to cast a wide net for volunteers from among our politically conservative colleagues (and other colleagues for whom their may be a perceived cost to participating). The call will contain language something along the lines of the following: “We particularly encourage members of the HCI community who identify as political conservatives to participate.” To mitigate social cost, we will also allow for anonymous submissions, which will be presented by our moderator (who will also highlight this general issue in his remarks).

### **Panel Format**

After an opening statement from our moderator that will motivate the panel and introduce the panel's two key questions (5 min), all five panelists will receive 8 minutes to present their answers to the questions. This will leave approximately 35 minutes for audience participation. We anticipate that the first 10 minutes of this time will consist of the content associated with our “Call for Audience Participation”. We will then open the floor for 20-25 minutes of open Q&A.

We will make changes to this format as necessary to adjust to current events and to build ties with other events at CHI. For example, rather than including a brief period for affinity group formation within our own panel as was planned, we will defer this activity to the brainstorming-focused SIG on public policy that will be scheduled for the next day. We will also encourage our panelists to be in dialogue with the immigration-focused panel that will proceed our event.

### Panel Outcomes

Like most panels, a primary goal of our panel is to stimulate discussion around the subject of the panel and the specific topics that our panelists raise. However, a co-equal goal of our panel is *facilitating action*, both in terms of instigating new research projects and catalyzing new community-building efforts. The success of our panel will be in many ways defined by whether research that follows from our discussion appears at CHI in future years and whether the panel can contribute to the strengthening of a sense of community among people in SIGCHI interested in the welfare of the United States.

To work towards these goals, following the completion of the panel, Hecht will lead an effort to aggregate the research agendas proposed by our panelists and audience members into a single blog post publicized on the CHI Facebook group, among other outlets. Our hope is that this post can be cited in future HCI papers as a way to help justify the motivation of research projects that emerge from the agenda.

### Topics to be Discussed

In order to provide an early overview of the topics that may be raised at the panel, we had initial discussions with our panelists about the topics they may raise in their presentations. In these discussions, the following topics emerged:

- **Making automation-related job loss a top HCI priority:** HCI is about improving relationships between humans and technology. As such, the displacement of people from their sources of income due to automation-related technological change [2, 4] is, at its core, an HCI problem. Can we build

sociotechnical tools that ensure a more equitable distribution of the economic benefits of technology?

- **Addressing "fake news":** How can we prevent the online social networks that connect us from being conduits for propaganda and other "fake news"? Can we make social media tools that would enable readers to flag posts as suspicious or false? Can we build tools that help to promote truthful postings?
- **More action, less description:** In many cases, the HCI community has done descriptive work on issues raised by the 2016 election (e.g. online harassment [1, 3, 7], algorithmic fairness [5, 6]), but the election highlighted that the impact of this work needs to be increased. How can we incentivize more high-risk, action-oriented work in these domains?
- **Civic technology:** The HCI community has a long history in civic tech, but the 2016 election highlighted some aspects of this domain that need addressing. For instance, can we build tools to help citizens design better voting districts? Can we provide citizens with tools to help them make residential choices that reduce gerrymandering?
- **Citizen science and science awareness:** Can we use citizen science as a means to increase scientific awareness at scale, in particular for issues related to biodiversity, climate change and medicine?
- **Increasing the proactivity of the CHI community:** Is the CHI community too reactive? How can we ensure the CHI community is working on issues related to the 2020 election and beyond?

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**References**

- [1] Ashktorab, Z. and Vitak, J. 2016. Designing Cyberbullying Mitigation and Prevention Solutions through Participatory Design With Teenagers. *CHI* (2016).
- [2] Bernstein, A. and Raman, A. 2015. The Great Decoupling: An Interview with Erik Brynjolfsson and Andrew McAfee. *Harvard Business Review*.
- [3] Blackwell, L., Hardy, J., Ammari, T., Veinot, T.C., Lampe, C. and Schoenebeck, S.Y. 2016. LGBT Parents and Social Media: Advocacy, Privacy, and Disclosure during Shifting Social Movements. *CHI* (2016).
- [4] Brynjolfsson, E. and McAfee, A. 2014. *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.
- [5] Johnson, I., McMahon, C., Schöning, J. and Hecht, B. 2017. The Effect of Population and “Structural” Biases on Social Media-based Algorithms – A Case Study in Geolocation Inference Across the Urban-Rural Spectrum. *CHI '17* (2017).
- [6] Kay, M., Matuszek, C. and Munson, S.A. 2015. Unequal Representation and Gender Stereotypes in Image Search Results for Occupations. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (New York, NY, USA, 2015), 3819–3828.
- [7] Pater, J., Kim, M.K., Mynatt, E.D. and Fiesler, C. 2016. Characterizations of Online Harassment: Comparing Policies Across Social Media Platforms. *GROUP* (2016).
- [8] Shneiderman, B. 2002. ACM’s Computing Professionals Face New Challenges. *Commun. ACM*. 45, 2 (Feb. 2002), 31–34.
- [9] Shneiderman, B. 1992. Socially Responsible Computing I: A Call to Action Following the L.A. Riots. *SIGCHI Bull.* 24, 3 (Jul. 1992), 14–15.
- [10] Shneiderman, B. 1992. Socially Responsible Computing II: First Steps on the Path to Positive Contributions. *SIGCHI Bull.* 24, 3 (Jul. 1992), 16–17.