Abstract
Grassroots initiatives enable communities of stakeholders to transform urban landscapes and impact broader political and cultural trajectories. In this two-day workshop, we present opportunities to engage HCI research with activist communities in Vancouver, the city hosting CHI’11. Working directly with local activist organizations, we explore the processes, materials, challenges, and goals of grassroots communities. Our bottom-up approach, including explorations of urban spaces and activist headquarters, participatory design sessions, reflection, critique and creative design of political artifacts will bring together a diverse group of HCI researchers, activists and artists. The workshop will result in concrete strategies for bottom-up activism and serve to inform the design of future interactive systems in the domain of political computing.

Keywords
Political computing, urban computing

Introduction and Motivation
"This party has come from the grass roots. It has grown from the soil of people's hard necessities" - Albert J. Beveridge, 1912

Grassroots movements shape our cities, cultures and politics. From community gardens, street art and neighborhood watch campaigns, to rallies, protests and
large-scale revolutions, bottom-up initiatives enable stakeholders to voice their concerns and act as agents of change. In contrast to the power structures implemented by traditional top-down organizations, grassroots activism is often spontaneous, non-hierarchical and volunteer-driven. Consequently, grassroots communities face unique challenges, risks and constraints, which shape designs and appropriations of interactive systems.

Technology continues to emerge as an instrument for supporting and sustaining grassroots movements: communication tools empower activists to collaborate and coordinate, for instance during the ‘Twitter Revolution’ in Moldova [1] or in numerous Facebook campaigns; creative media facilitate compelling and public expressions of stakeholder concerns [8][11]; mobile phone platforms such as FrontlineSMS [5] and TXTMob [7] allow rapid and distributed dissemination of information. A growing body of HCI literature reflects on the intersection between technology, art and politics e.g., [9]. Our two-day workshop aims to move beyond theoretical discourse and directly engage with the processes, goals, challenges and ideas of activist stakeholders in Vancouver, a city marked by a rich history of grassroots political movements. Our workshop venue has a tradition of supporting grassroots political movements, for example through the Uts’am/Witness project [4] that prevented the over logging of Elaho Valley, BC.

While HCI research has a tradition of working with diverse stakeholder populations (e.g., [3][10]), grassroots communities embody a previously unexplored set of values, practices and methods. Our workshop aims to bring together a diverse group of CHI researchers and practitioners, as well as artists and activists who are interested in and contributing to this emerging space. Our workshop will serve to develop concrete strategies, reveal opportunities for technical interventions, and inform approaches for productive engagement between academic research and the bottom-up practices that shape our cities, cultures, and politics.

**Workshop Goals and Themes**

The workshop engages with activist groups in Vancouver to explore their goals, the technological and non-technological practices employed to achieve them, and key challenges complicating their respective success. In addition to workshop participants’ own projects and experiences, we will focus on opportunities for HCI research to learn from and potentially better support activist communities. The workshop will thus present a venue for participants, organizers and collaborating organizations to share their knowledge of social and technological practices that surround urban grassroots movements and expressions.

Our overarching goal is to foreground a range of diverse issues associated with designing for—and with—urban grassroots communities. In doing so, we hope to establish a more thorough understanding of bottom-up design processes and outcomes. Specifically, this workshop will explore the following themes:

- **Grassroots Tools and Expression**: What technological and non-technological tools are drawn on to help achieve grassroots community’s goals? In what ways do groups project their concerns into the public sphere to engender interest among city stakeholders? How are technological tools leveraged to coordinate
collective social action? And, what are key barriers complicating these collective processes?

- **Constraints**: Grassroots communities represent a very different type of group than the HCI community has traditionally engaged with. How do factors such as lack of funding as well as changing physical environments and resources affect the role researchers play in helping communities achieve their goals? How might technology be designed to more effectively enable grassroots communities adapt to these changing conditions? What are appropriate methods to productively engage community members in design processes in face of their changing circumstances?

- **Failure and risks**: Grassroots initiatives are not always successful; at times they face direct opposition by broader political structures, cultural practices and forces in the city. What are the processes and practices through which communities overcome such challenges to enact change? For example, one common way of drawing attention to political conflicts over public issues is through organizing demonstrations. What role does technology play in these efforts? How do groups recover from technical and organizational breakdowns?

- **Autonomy**: In contrast to consumers or clients, grassroots groups have a fundamentally different orientation to HCI researchers. What new methods and approaches are appropriate for engaging and designing with these groups as collaborators? What are appropriate and effective mechanisms for researchers to establish rapport and trust with community members? Additionally, grassroots communities typically operate on a volunteer basis. What types of new challenges and opportunities does engaging with this type of user group raise for HCI researchers? How might technology be design to strengthen solidarity among the group—and potentially extend it in the recruitment of new members?

- **Security and surveillance**: Grassroots activists may forego cultural, social and legal norms to achieve their goals or draw attention to matters of concern. How should researchers reconcile the ethical issues associated with the technologies they create being used to support action that may violate local or federal laws? Additionally, while mobile platforms have been leveraged as productive tools for organizing bottom-up action, they could be utilized by opposing stakeholders (e.g., dominant political party) to monitor community members and potentially undermine their efforts. What are the underlying privacy and security implications for protecting grassroots participants for HCI researchers? How does a post 9-11 world, marked by a culture of suspicion, surveillance and fear impact activist strategies, particularly in regard to publically-placed technical artifacts?

- **Power structure**: Collective action to accomplish community goals is a common part of grassroots communities’ work. Non-hierarchical power structure is common to collectivist movements, potentially suggesting a different set considerations to be taken into account when design for or with these groups. What new methods or approaches are required to support decentralized power structures in social change communities? What approaches have previously been affective or ineffective in working with
these kinds of groups? How should designers approach partnering with groups to empower the change they seek while holistically taking into account community members’ perspectives? Could researchers’ involvement with groups—and particular members—unsettle or subvert power structures and community relations?

- **Evaluation**: What are appropriate metrics for evaluation of technologies designed to support grassroots communities? What role should action research play as a productive outcome of political computing research? Should evidence of social change from design interventions be an additional metric of evaluation?

**Outcomes**

Our workshop will result in concrete strategies for understanding and supporting bottom-up activism within the domain of political computing. We will facilitate discussions around the practical and active engagement of HCI research with grassroots movements. Workshop proceedings will be documented on our website with a forum-enabled feature, which will remain active after CHI for further dialogue. Artifacts and posters created during the workshop will be exhibited throughout CHI; and an open social event will be hosted at the Vancouver Roundhouse Community Center to invite participation from the broader CHI community. Findings may be organized into an edited volume such as a special issue of a journal or book. Finally, we hope that by hosting this workshop we will support future collaborations that will continue beyond CHI.

**Workshop website:** [http://staceyk.org/chi11workshop/](http://staceyk.org/chi11workshop/)

**References**

[10] Odom, W. 2010. "Mate, we don't need a chip to tell us the soil's dry": opportunities for designing interactive systems to support urban food production. In *Proc. of DIS’10*.