Worker Data Collectives as a means to Improve Accountability, Combat Surveillance and Reduce Inequalities

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ABSTRACT

Platform-based laborers face unprecedented challenges and working conditions that result from algorithmic opacity, insufficient data transparency, and unclear policies and regulations. The CSCW and HCI communities increasingly turn to worker data collectives as a means to advance related policy and regulation, hold platforms accountable for data transparency/disclosure, and empower the collective worker voice. However, fundamental questions remain for designing, governing and sustaining such data infrastructures. In this workshop, we leverage frameworks such as data feminism to design sustainable and power-aware data collectives to tackle challenges present in online labor platforms (e.g., ridesharing, freelancing, crowdwork, carework). While data collectives aim to support worker collectives and complement relevant policy initiatives, the goal of this workshop is to encourage their designers to consider topics of governance, privacy, trust, and transparency. In this one-day session, we convene research and advocacy community members to reflect on critical platform work issues, as well as to collaborate on codesigning data collectives that ethically and equitably address these concerns by supporting working collectivism and informing policy development.

CCS CONCEPTS

• **Human-centered computing** → **Collaborative and social computing systems and tools**; *Collaborative and social computing design and evaluation methods.*

KEYWORDS

Platform Work, Data, Policymaking, Advocacy

1 INTRODUCTION

The emergence of platform-based work over the past decade disrupted labor markets across the globe. As of Sept 2023, the gig workforce was estimated to range from 154 to 435 million workers, comprising 4-13% of the global labor force [1] [13]. Workers increasingly engage in platform-based gig work for the promise of work flexibility and autonomy [40], potential to mitigate discrimination as enabled by anonymity on certain platforms [20] and opportunity for upskilling provided by macrotask/freelancing platforms [20].

But as platform-based labor emerges to complement traditional employment, workers face unprecedented challenges and data harms [34]: algorithmically-reinforced inequality and power differentials [6, 7, 26, 40], overexposure to workplace monitoring and surveillance [29, 30], physical risks [2, 11, 32], heightened uncertainty [3, 28], and social isolation [41, 42]. Numerous nations intend to increase regulation of labor platforms [10, 14, 37], but are limited by the scarcity of publicly accessible worker data [21].

In resistance to surveillance and hegemonic data practices of platforms [1, 33, 35], workers increasingly engage in self-tracking through individual means [22] or third-party tools [2]. In the absence

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[1] Lower bound of 154 million or 4.4% represents an estimate of only main/full-time workers while upper bound of 435 million or 12.5% also includes part-time/secondary workers
[2] e.g. Gridwise, Stride and Strava

of sufficient policy and regulations for responsible platform practices, researchers and advocates increasingly turn to data collectives and tools as a method for advancing regulation [7, 25], restoring worker power [17, 24, 36, 43] and holding platforms accountable to more ethical, fair and community-centered data practices[3] [29].

To define worker data collectives, we turn the HCI/CSCW literature for aggregating potential future data infrastructures [24, 36, 44]. Recent efforts leveraged participatory design with workers and relevant stakeholders to reveal several (counter-)**data collectives** for supporting workers. Such collective data institutions included digital social institutions (e.g., collective wikis, online forums/groups/unions [42]), offline social institutions (e.g., union strikes leveraging social media to coalesce/organize [23]), third-party tools [24, 36, 43], self-tracking [22], and platform-evaluation (e.g., Fairwork [19]). Regardless of the specific infrastructure, data collectives hold considerable promise for facilitating worker advocacy and empowerment, since they embody a site for communities of resistance [4] and enable collective data actions (e.g., counter-data collection, data refusal/strikes [38, 39, 45]).

To fully enact the potential of data collectives as a vehicle for producing counter-data and restituting worker power/rights, designers and maintainers must prioritize principles of care [5, 15, 17], ethics [27] and justice [12, 18]. We draw from seven principles of the intersectional feminist framework by D'Ignazio and Klein [16] and insights around workers' challenges informed by prior empirical work [24, 25] to consider ways of:

Articulating invisible/unpaid work and addressing wage theft—*Principle 7: Making Labor Visible.*

Collectively auditing/disaggregating worker data withheld by platforms and challenging resultant algorithmic decisions—*Principles 1 & 2: Examining & Challenging Power.*

Addressing (physical and digital) **safety risks** that platforms fail to account for, including dangers present on roads, in strangers' homes, and from online scams—*Principles 3 & 6: Elevating Emotion and Embodiment by Considering Context.*

Gathering qualitative accounts/narratives of discrimination against marginalized individuals and work strategies—*Principles 4 & 5: Rethink Binaries and Hierarchies, Embrace Pluralism.*

Building infrastructure around interpreting and operationalizing assets in data collectives to precipitate material change—*Principle 6: Considering Context.*

Ultimately, advocates leveraging data collectives aim to improve labor regulations or propose litigation to advance worker (data) protections. To ensure policy-influencing data collectives maintain long-term trust with workers, designers must consider the balance of governance/power structures with privacy protections, while allowing non-worker stakeholders to access necessary insights to make informed decisions. In light of such multi-stakeholder considerations, we plan to discuss effective designs to unlock potentials of data collectives as boundary objects to connect different stakeholders' needs and ways of knowing and collaborating, where stakeholders include 1) workers, 2) researchers, and 3) practitioners (advocates, activist groups, lawmakers and policymakers, etc.).

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[3]e.g., FairFare, a worker auditing tool to uncover platform commission, and Driver's Seat Cooperative, now under the Worker's Algorithm Observatory, to help drivers and researchers investigate gig platform transparency and workers' experiences

2 WORKSHOP GOALS

Convene a community of different stakeholder groups to discuss challenges and opportunities of worker data-sharing collectives for empowering platform workers. Many researcher, advocacy, and worker-organizing efforts have converged on the importance and necessity of worker data (practices) for auditing platforms, surfacing platform manipulation, or informing the need for policy and regulation [8, 9, 31, 36, 43]. This workshop will serve as an avenue for collaboration among these existing efforts.

Contextualize worker data within broader questions of worker rights, well-being and autonomy, including asking what kinds of worker data are meaningful, where data is shaped by conditions of constant worker surveillance, and the limitations of data as a tool.

Ideate and exchange perspectives on how such technologies can be governed and impact labor regulation across geographic regions/nations. In addition to constructing a shared understanding of the landscape, we aim to form a future research agenda.

3 WORKSHOP AGENDA & ACTIVITIES

A tentative workshop schedule is outlined in Table 1. We will begin with a welcome keynote by 1-2 speaker(s) experienced in worker advocacy or labor policy. Next, participants will introduce their backgrounds and interests through lightning talks. Following a break, participants will engage in interactive group design and discussion to document ideas, themes, experiences, challenges/questions, and resources related to worker data collectives. Afterwards, each group will present the outcomes of their design. The workshop will conclude with a synthesis of high-level themes surfaced from presentations and a discussion of future directions.

Time	Activity
9-9:30am	Welcome & Keynote
9:30-10:30am	Lightning Talk Introductions & Reflections
10:30-10:45am	*Coffee break*
10:45am-11:30pm	Confronting Design Challenges
11:30am-12:30pm	Co-Designing Worker Data Collectives
12:30-1:30pm	*Lunch*
1:30-2:45pm	Presentation & Artefact Share-Out
2:45-3pm	*Coffee break*
3-4:30pm	Takeaways and Future Directions
4:30-5pm	Closing remarks

Table 1: Proposed Workshop Agenda

Welcome & Keynote

To begin the workshop, 1-2 keynote speaker(s) with firsthand experience at/with (non-profit) worker organizations will share insights on challenges and opportunities related to labor advocacy for platform workers. We will extend the invitation to active worker-organizations (e.g., Rideshare Drivers United and Colorado Independent Drivers Union), non-profit institutions (e.g., Colorado Fiscal Institute), legal advocacy groups (e.g., Towards Justice), and leading academic researchers.

Activity 1: Lightning Introductions & Reflections

Participants will introduce themselves and share reflections on a question below as addressed in their submissions. Listening participants will be encouraged to respond with further reflections.

Activity 2: Confronting Design Challenges

Participants will brainstorm potential challenges in designing a worker data collective and issues of current platform work conditions for the system to address. Below are higher-level questions around data collective design and an overview of potential stakeholders, issues and data structures (Fig. 1) to kick-start the session.

Stakeholders	Data Collectives/Tools	(Worker) Challenges & Issues
Workers/Worker Unions	Data Probes	Wage Theft
Policy/law makers	Social Media Groups	Discrimination
Advocates	Collective Wikis	Safety
Researchers	Platform evaluators (Fairwork)	Pricing fluctuations
Clients/Consumers	Collective Tracking (GridWise)	Ratings/Profile Upkeep
	Self Tracking (Stride)	Algorithmic opacity
	Driver's Bill of Rights (Rideshare Drivers United)	

Figure 1: Overview of Impacted Stakeholders, Worker Challenges/Issues and Potential Data Collectives

Activity 3: Co-Designing Worker Data Collectives

Participants will break into groups. Each group will design data collective structure(s) for a specific platform/work type using digital templates (e.g., guided Miro boards) and/or physical materials (e.g., posters, sticky notes, markers). Participants' submissions will inform their group assignments. Examples of possible platform groupings include: 1) *Rideshare & Delivery* (e.g., Uber, Doordash), 2) *Freelancing & Macrotasking* (e.g., Upwork, Fiverr), 3) *Microtasking* (e.g., Amazon Mechanical Turk, Crowdflower, Appen), 4) Caretaking and Household Work (e.g., Care.com, CareRev). When designing worker data collectives, we encourage participants to consider the following questions:

Activity 4: Presentation & Artefact Share-Out

Each group will present their data collective from activity 3. This can include describing infrastructural decisions, ideas for addressing the design questions, and new concerns or questions that arose during discussions. Observing groups will be encouraged to ask follow-up questions and share reflections, while keeping in mind the questions below:

Activity 5: Takeaways and Future Directions

To frame the final discussion, facilitators will summarize opportunities and challenges based on participants' ideas, questions, and concerns. Participants will be given space to consider and propose future research agendas or avenues of work.

4 POST-WORKSHOP ACTIVITIES

Post-workshop, a document will be shared to participants to summarize each group's designed data collective with a) a link to the correlating Miro board, b) photos of physical artefacts created if applicable, c) a summary of the group's presentation and questions surfaced by others, and d) questions and themes from the talk-back session. Furthermore, we seek to support continuing collaboration interests that arise—for example, we may create a shared document for participants to share new resources or set up a collaborative platform to facilitate cross-organizational efforts related advancing work data collectives. Inspired by the workshop by Yang et. al. on bridging HCI and policy design, we may also consider synthesizing workshop insights into a provocation/position paper.

5 LOGISTICS

This workshop will run as a full-day hybrid workshop to allow participation from a diverse range of geographic locations and backgrounds. Sessions will be mediated through Zoom and asynchronous conversations will be facilitated via Slack .

5.1 Participant Recruitment & Selection

We will recruit a maximum of 50 participants who work on or demonstrate interest in platform-based labor. This includes researchers with backgrounds in Computer-Supported Cooperative Work, Human-Computer Interaction, Public Policy, Law (and beyond), as well as organizers, activists, and platform workers.

5.2 Submission Formats & Requirements:

Interested participants should submit a statement of interest as 1) a maximum 500-word personal statement or 2) a maximum two-page extended abstract/case study about a specific type of platform-based work as related to the workshop themes. The statement should address the question: *How data can inform policymaking*? To optimize group assignments, we recommend submissions specify the type(s) of platforms/work where they have the most interest/experience.

We highly encourage submissions to reflect on concepts of power, ethics and their own positionality as related to platform-based work and counter-data. Guiding questions of Activity 1: Lightning Introductions & Reflections can provide a starting ground. Submissions incorporating figures/diagrams for ideating data sharing structures are welcomed but not required; figures, diagrams, and references do not count towards the page limit.

5.3 Resources Required

Equipment and Supplies Needed to Run the Workshop: To accommodate in-person participants, we request access to standard conference room facilities, including seating for up to 25 participants, A/V equipment, and access to physical design resources (e.g., markers, sticky-notes, posters/whiteboards/large easel pads).
Resources participants are expected to bring or provide: Online participants will need access to a desktop computer or laptop with internet connectivity to participate. In-person participants will also be expected to bring laptops in order to participate in the Miro board activities, and optionally to access their own and/or other participants statements of interest.

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