

CS 4873: Computing, Society & Professionalism

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Week 13: Algorithmic Labor
April 1, 2020

Background

- Technology and automation are transforming the workplace
 - Increases in productivity
 - Globalization of job market
 - Organization of companies
 - Telework

* Impacts of automated and AI technologies on work and workforce

Jun 8, 2018, 06:59pm EDT

Dislocation And Its Discontents: Ride-Sharing's Impact On The Taxi Industry



Michael Goldstein Contributor @ Travel



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In this June 26, 2017 photo, a NYC taxi medallion. The value of those medallions has plummeted. (AP... [+]

Taxi driving in U.S. cities like New York and Chicago has been a regulated industry since at least the 1930s. A limited number of medallions, representing a licensing fee paid to the city, were issued to taxicab owners. Many taxi drivers worked part time or temporarily,

<https://www.forbes.com/sites/michaelgoldstein/2018/06/08/uber-lyft-taxi-drivers/#1f1490b259f0>

Gig economy

- For the last seven years, gig companies like Uber, Lyft, Instacart, Doordash and Postmates have leveraged the language of “technology” and “innovation” to hide how their business models shift risks on to a vulnerable and largely immigrant workforce.
 - * Uber claims itself as a technology company
 - * Uber refers to drivers as “driver-partners,” thus disassociating the company from an employer-employee relationship.

Power asymmetries

- * But are they really independent?

Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal of Communication*, 10, 27.

Power asymmetries

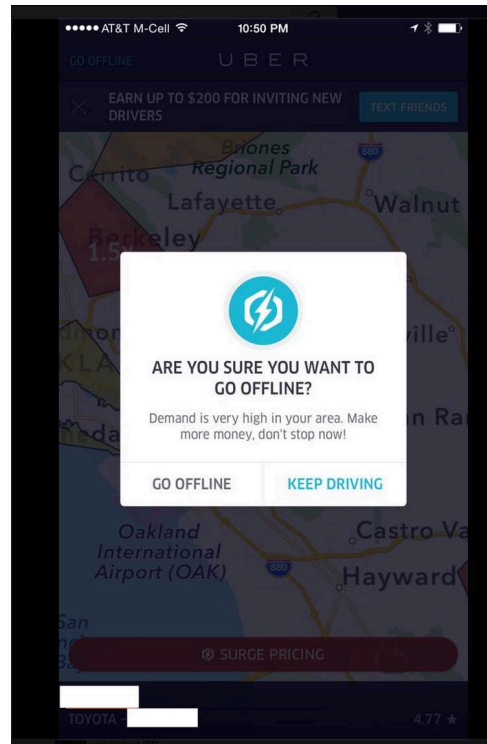
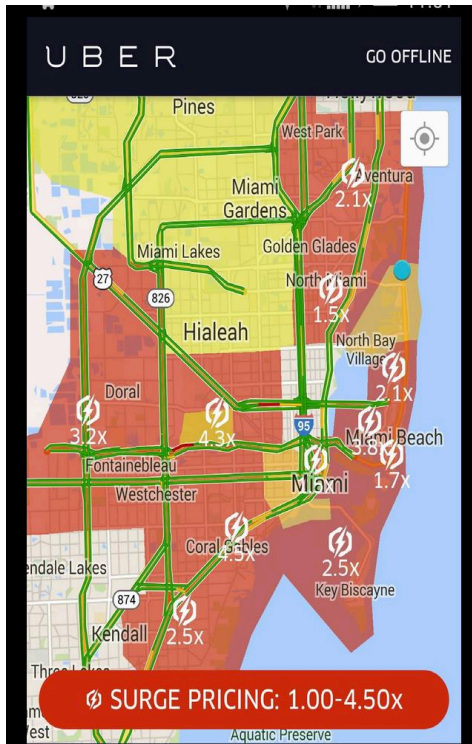
- * Drivers risk “deactivation” (being suspended or removed permanently from the system) for cancelling unprofitable fares.

Show the destination before. If we're independent contractors, we should have the right to refuse. If I look down and it's 3:00 in the afternoon and the guy is going to JFK, I'm not going to take it. When I get to the guy's location and I get to JFK, I'm not going to make \$40 for 3 hours of work... They tell us it's our choice whether to take a trip or not, so how can they penalize us for that?

Power asymmetries

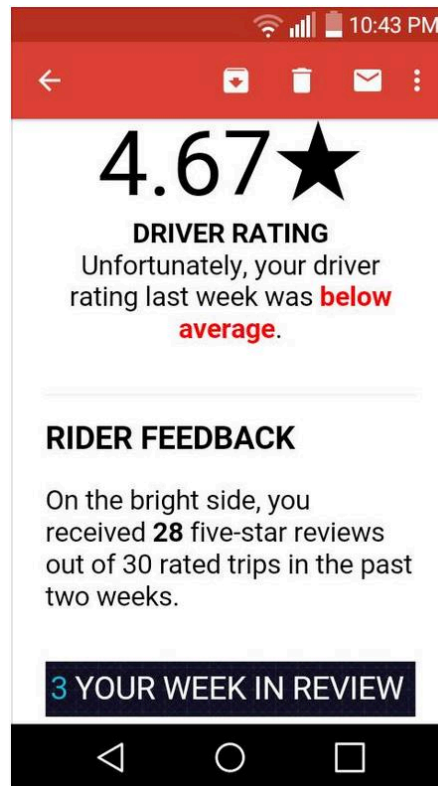
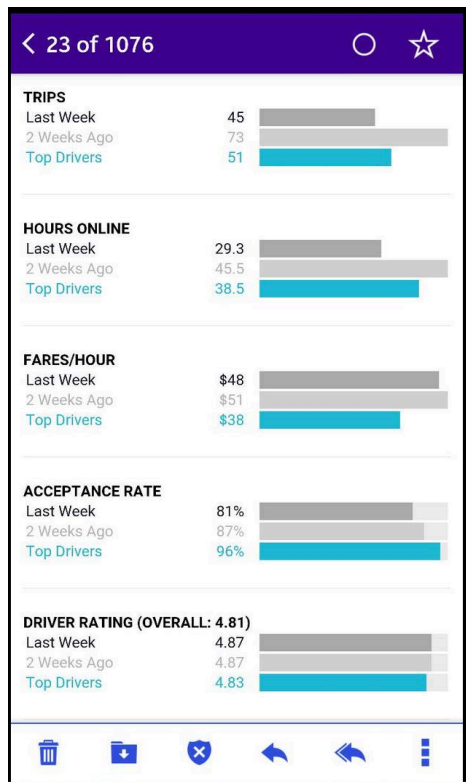
- Reality of blind ride acceptances (min fare rule and Uber's share)
- The Uber system contradict the rhetorical framing of drivers as entrepreneurs.
 - “Our powerful technology platform delivers turnkey entrepreneurship to drivers across the country and around the world”
- *Entrepreneur is, I feel like a bit of a stretch. I mean, I feel like the definition of an entrepreneur is, you know, having your own idea and taking off with that. I feel like Uber is just like a side gig, not any kind of entrepreneur endeavor... I don't feel like entrepreneur is a great classification for drivers, unless you're running a business out of your Uber car, I guess that's something an entrepreneur could do.*

Power asymmetries




- Surge pricing and algorithmic management
- Problems with predictions of demand at Uber
- Riders gaming the system

Power asymmetries



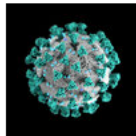
- Driver ratings and surveillance
 - Uber's business model is rooted in Taylorist traditions of using worker monitoring to identify and create new efficiencies in workflows
- Instead of imposing disciplinary measures on drivers, Uber controls how drivers behave through weekly performance metrics delivered after the fact of their work.
 - Opaque rating system
- In case of dispute, the passenger is favored



Power asymmetries in algorithmic labor during a pandemic

* Story of Ahmed

- For the last week, Ahmed, a driver for Uber and Lyft, has faced a heartbreaking choice: starvation or sickness.
- For unprotected gig workers like Ahmed, the Covid-19 pandemic is a crisis on top of a crisis.

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SPECIAL SERIES

The Coronavirus Crisis



Amazon, Instacart Grocery Delivery Workers Demand Coronavirus Protection And Pay

March 30, 2020 · 8:47 AM ET

Heard on [All Things Considered](#)

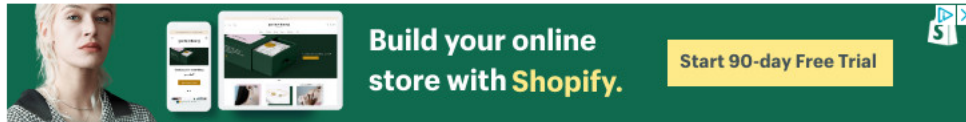
ALINA SELYUKH



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<https://www.npr.org/2020/03/30/823767492/amazon-instacart-grocery-delivery-workers-strike-for-coronavirus-protection-and->



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TECH CORONAVIRUS

Instacart claims 'absolutely no impact' from planned workers' strike


The company says it sold more groceries in the past 72 hours 'than ever before'

By Kim Lyons | Mar 30, 2020, 6:00pm EDT

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* Uber's response

- Uber's CEO, Dara Khosrowshahi, is using the pandemic as an opportunity to urge the Trump administration to create a new category of worker – neither employee nor independent contractor – which would not give workers basic safety net protections, but would inscribe the company's exploitative business model into federal law.

Should Instacart, Uber, and Amazon provide their workers sick pay and increased protection from COVID-19 infection?

Kantian perspective

Act utilitarian perspective

Social contract theory perspective

AI-augmented work

- Two American work environments in which AI technologies often are imagined to have great disruptive potential: agriculture and retail.

* AI-augmented work

- Farming technologies are often simply being deployed, not integrated within existing work practices.
- Retail technologies “hide” the labor of integration and the humans who are either left in the lurch or relied upon to smooth out these technologies’ rough edges.

“Like Shock Absorbers”: Understanding the Human Infrastructures of Technology-Mediated Mental Health Support

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ABSTRACT

Significant research in HCI and beyond has sought to understand end-user needs in formal and informal technology-mediated mental health support (TMMHS) systems. However, little work has been done to understand the experiences and needs of the individuals who power or support these systems, particularly in the Global South. We present a qualitative study

As a consequence of social stigma, difficulty in accessing care, and a vast shortage of trained mental health professionals, the needs of people experiencing debilitating mental distress are not being met globally, particularly in the Global South [57]. Half of all people experiencing a mental illness do not receive any treatment, and in the Global South, this number is as high as 90% [49, 56, 59]. In addressing this global shortage of

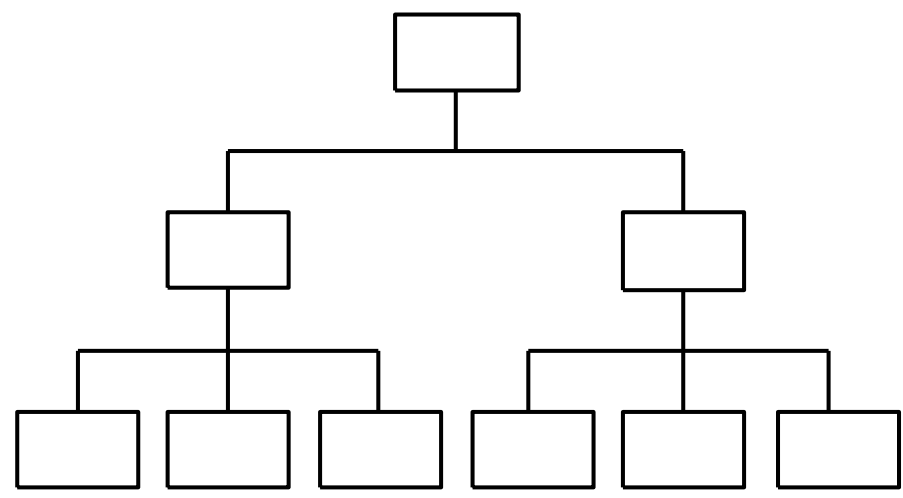
Foreground the often invisible labor involved in erecting and maintaining the institutional, interpersonal, and individual boundaries that are critical to realizing the goals of mental health helplines

Extra Slides

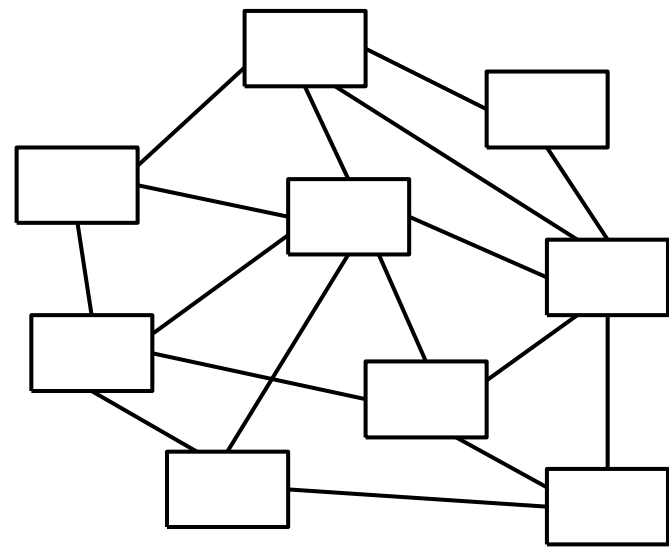
Organizational Changes

- Information technology integration into firms
 - Automating back office functions (e.g., payroll)
 - Improving manufacturing
 - Improving communication among business units
- Results
 - Flattened organizational structures
 - Eliminating transactional middlemen (supply-chain automation)

Inexpensive Interactions Lead to Flexible Information Flow



(a)



(b)