

# Empowering and Enhancing Workers Through Building A Community-Centered Gig Economy

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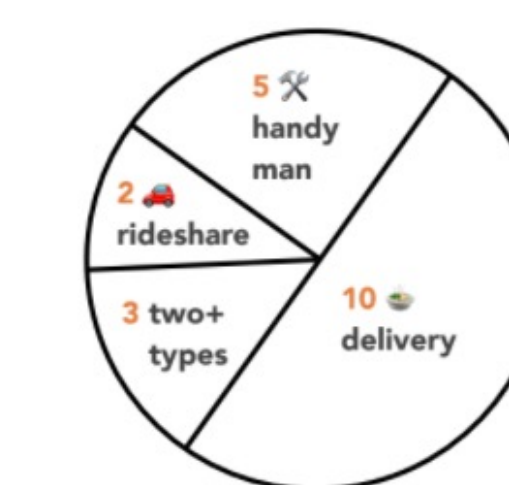
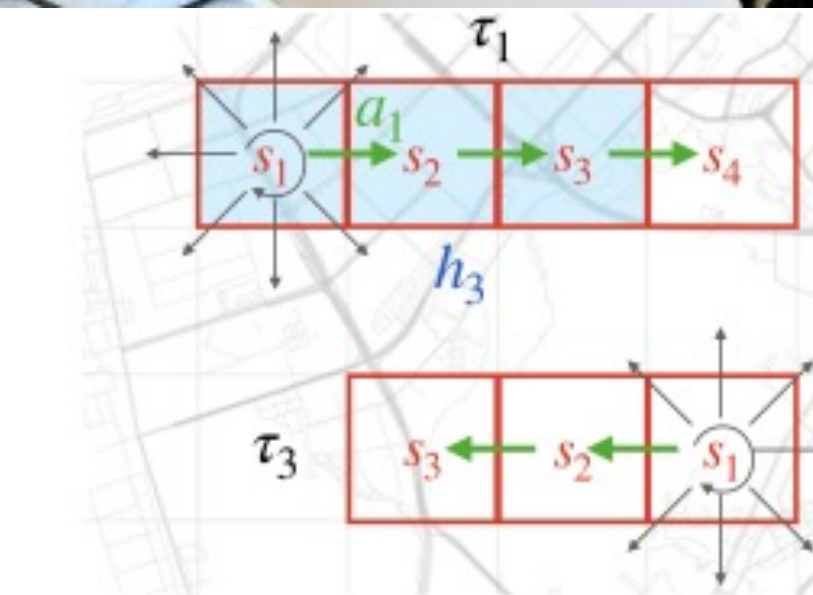
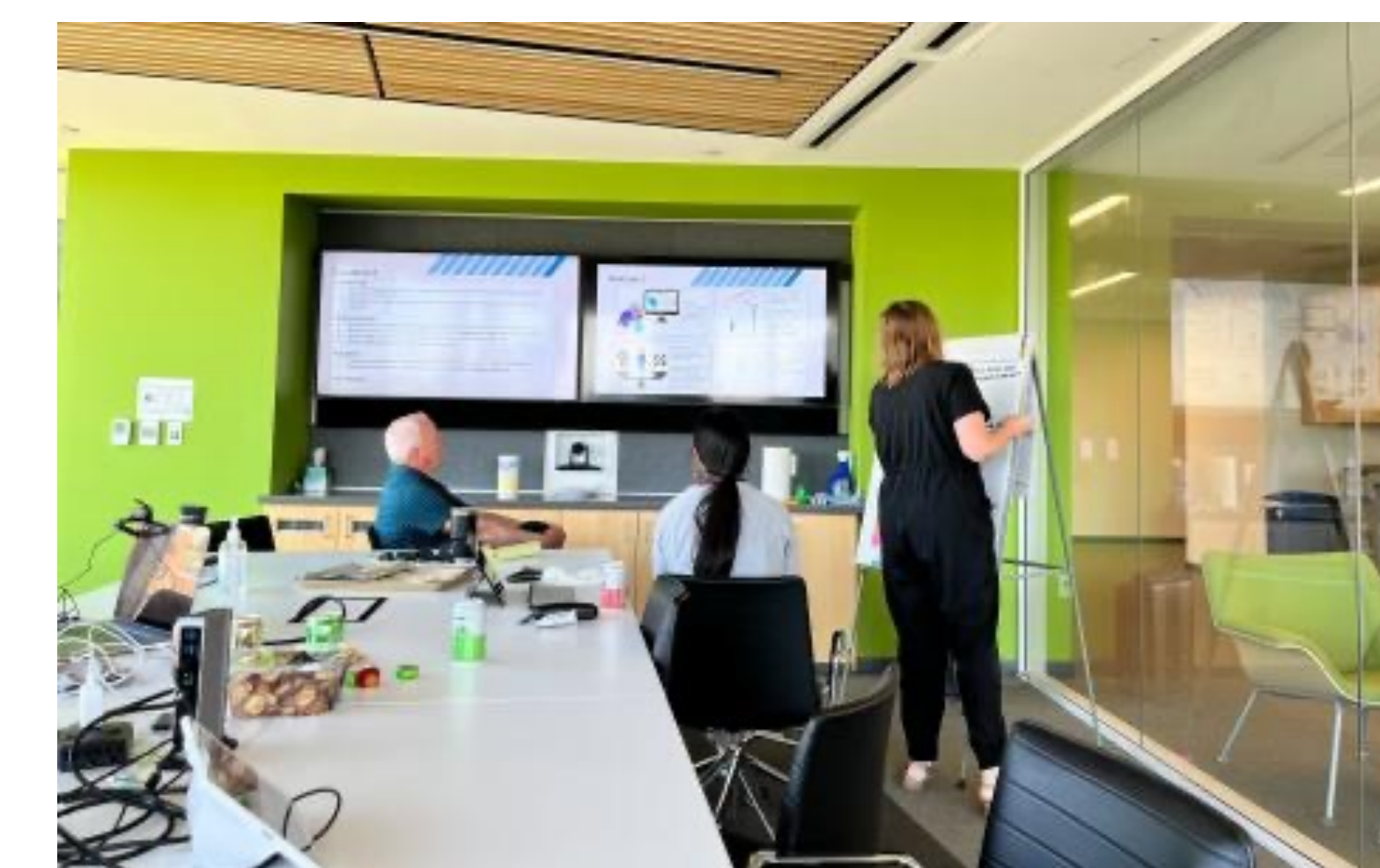
**Motivations:** Worker wellbeing on the gig economy platforms have become significant societal problems. For example, most gig workers lack financial stability, have low earning efficiency and lack autonomy, and many have health issues due to long work hours and limited flexibility.

**Intellectual Merits:** (1) We will generate knowledge about human behavior in complicated socio-technical systems. (2) We will create novel algorithms to balance the diverse set of objectives and constraints of the workers and communities, along with interfaces to explain the algorithms. (3) We will deploy our system and evaluate its effectiveness to address the problems of worker wellbeing and systematic biases in gig economy.

**Project activities to date:** (1) We have conducted in-depth semi-structured interviews with gig workers, content analysis using social media data, and decision modeling using trajectory data to understand gig workers' concerns, challenges, and decision-making strategies related to gig worker wellbeing. (2) In order to learn latent needs and social boundaries of stakeholders (workers, platforms, and policymakers) and evaluate the imagined solutions without high efforts of implementation, we conducted speed dating sessions to present to a diverse set of stakeholders a wide range of service and technological interventions.

**Broader impact:** This work will improve the social and economic wellbeing of gig workers and people live in the three metropolitan areas of Pittsburgh, Minneapolis-Saint Paul, and Austin.

The solution can be potentially generalized to the whole nation. The PIs will make the proposed toolkits, platform, data, and algorithms open and explainable to the users and communities. This work will contribute to educational integration activities in four institutions and the creation of new modules for the massive open online courses.



**Next steps:** (1) Synthesize and generate insights that inform the design. (2) Develop data-driven decision support systems for gig workers to navigate gigs on existing platforms. (3) Engage workers and community stakeholders in the co-design of new possibilities for community-driven and community-owned gig platforms.