Ning Ma

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Research Interests

My research interests are in Human-Computer Interaction, Computer-Supported Collaborative Work. I study the *power relationships* and the social-economical contexts of workers with respect to other stakeholders such as customers, platforms and merchants in gig platforms. Particularly, my work attends to workers from marginalized populations including women, financially distressed populations, and rural communities.

Education

Pennsylvania State University, University Park, PA   December 2020
Ph.D. in Information Sciences and Technology
Advisor: Benjamin V. Hanrahan

Concordia University Wisconsin, Mequon, WI   May 2013
B.A. in Mathematics

Publications

Journals:

[J4] **Ning F Ma***, Veronica Rivera*, Zheng Yao, Dongwook Yoon. "'Brushing it Off': How Women Workers Manage and Cope with Bias and Harassment in Gender Agnostic Gig Platforms." *Proceedings of the 40th annual ACM conference on Human factors in computing systems (CHI 2022). [Submitted] *as co-leading author*

[J3] Hanrahan, Benjamin V., Anita Chen, Jiahua Ma, **Ning F. Ma**, Anna Squicciarini, and Saiph Savage. "The Expertise Involved in Deciding which HITs are Worth Doing on Amazon Mechanical Turk." *Proceedings of the ACM on Human-Computer Interaction 5, no. CSCW1 (2021): 1-23.*

[J2] **Ning F Ma** and Benjamin V Hanrahan. 2020. Unpacking Sharing in the Peer-to-Peer Economy: The Impact of Shared Needs and Backgrounds on Ride-Sharing. *Proceedings of the 23rd annual ACM conference on Computer Supported Cooperative Work (CSCW 2020). Minneapolis, MN, USA.* [PDF]

[J1] Johnna Blair, Yuhan Luo, **Ning F Ma,** Sooyeon Lee, and Eun Kyoung Choe. 2018. OneNote Meal: A Photo-Based Diary Study for Reflective Meal Tracking. *Proceedings of American Medical Informatics Association (AMIA '18).* [Presentation]

Conference Proceedings:

[C5] Benjamin V Hanrahan, **Ning F Ma**, Eber Betanzos, Saiph Savage. 2020. Reciprocal Research: Providing Value in Design Research from the Outset in the Rural United States. *In Proceedings of the Eleventh International Conference on Information and Communication Technologies and Development (pp. 1-5).*

[C4] **Ning F Ma** and Benjamin V Hanrahan. 2019. Part-Time Ride-Sharing: Recognizing the Context in which Drivers Ride-Share and its Impact on Platform Use. *Proc. ACM Hum.-Comput. Interact. 3, GROUP, Article 247 (December 2019), 17 pages. https://doi.org/10.1145/3361128* [PDF][Presentation]

[C3] Anita Chen, Chien Wen Yuan, **Ning F Ma**, and Benjamin V Hanrahan. 2019. Navigating Ride-Sharing Regulations: How Regulations Changed the 'Gig' of Ride-Sharing for Drivers in Taiwan. *Proceedings of the 37th annual ACM conference on Human factors in computing systems (CHI 2019). Glasgow, UK.*

[C2] **Ning F Ma**, Chien Wen Yuan, Moojan Ghafurian, and Benjamin V Hanrahan. 2018. Using Stakeholder Theory to Examine Drivers' Stake in Uber. *Proceedings of the 36th annual ACM conference on Human factors in computing systems (CHI 2018). Montreal, Canada.* [PDF] [Video][Presentation]

[C1] Benjamin V Hanrahan, **Ning F Ma**, and Chien Wen Yuan. 2017. The Roots of Bias on Uber. In *Proceedings of the 15th European Conference on Computer-Supported Cooperative Work-Exploratory Papers. European Society for Socially Embedded Technologies (EUSSET).*

Workshops:
[W2] Tang, Joice, **Ning F Ma***, and Dongwook Yoon. Understanding How Customers Attribute Accountability in Food Delivery Breakdowns. 2021. *Joint Proceedings of the ACM IUI 2021 Workshops, April 13–17, 2021, College Station, USA* [PDF] *as supervisor

[W1] **Ning F Ma** and Benjamin V Hanrahan. 2019. Supporting Relationship for On-Demand Exchanges in Local Communities. *ACM Computer Supported Cooperative Work 2019 Extended Abstract (CSCW 2019). Austin, USA.*

Teaching

Instructor	IST331 Foundation of Human-Centered Design (2020 Spring)
Teaching Assistant	IST 431 Information Environment (2016 Fall) IST 413 Usability Engineering (2018 Spring, 2018 Fall, 2019 Spring) SRA 268 Data Visualization (2019 Fall)

Research Appointments

University of British Columbia   January 2021 - present
Postdoctoral Fellow
Understanding women gig workers and invisible work in online freelancing

Pennsylvania State University   August 2016 - December 2020
Graduate Assistant
Understanding Ride-Sharing in On-Demand Platforms: Stakes, Dependency, and Sharing

Uber Inc.   May 2019 - August 2019
UX research Intern
Conducting user studies to inform why do couriers churn from platforms

Research Mentoring

Joice Tang, undergraduate research assistant at UBC   August 2020 - May 2021
Understanding how customers attribute accountability in food delivery breakdowns.
Co-mentoring with Dongwook Yoon.

Tabreek Somani, undergraduate research assistant at UBC   February 2021 - September 2021
Making sense of invisible labor with, and for online freelancers.
Co-mentoring with Dongwook Yoon.

Patrick Lee undergraduate research assistant at UBC   February 2021 - present
Doppelganger-phobia and identity fragmentation: understanding perceptions and ethical considerations towards interactive digital clones.
Co-mentoring with Dongwook Yoon.

Scholarship and Professional Activities

Student Enrichment Fund - Department of IST at Penn State   2018 - 2020
Travel grant of $1500/year for 3 years

Computing Research Association Grad Cohort San Francisco, CA   April 2018
Women in Computing (funded participation $1500)

Cornell University Summer School, Ithaca, NY   June 2018
Designing Technology for Social Impact (funded participation $1000)

MIT Media Lab, Cambridge, MA   November 2018
All Hands on Deck - Open Ocean Fellow (funded participation $1000)

CHIMe mentoring workshop at ACM CHI   2018, 2020, 2021

The Future of Work (Places) at ACM CHI. Austin, TX   November 2019

Services

Panelist	2021 Cornell University Summer School on Designing Technology for Social Impact
Reviewer	ACM CSCW 17', 18', 20', 21'
	ACM CHI 19', 20'
Area Chair	ACM CHI 21' late-breaking work
Social Event Chair	ACM CSCW 21'

Selected Press

"[How Uber drivers feel about being managed by machines](#)" in **Forbes**   May 2018

References

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