

Ning Ma

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Research Statement

My research interest lies broadly in human-computer interaction, computer-supported collaborative work and user-centered design. I am interested in understanding and designing for on-demand work. Leveraging on the contrast of ride-sharing in various contexts, I design interventions aimed at improving relationships between drivers and riders. The goal of my research is to 1) inform understanding of worker experiences and stakeholder relationships in on-demand workplaces and 2) explore novel ways to design and evaluate interactive technologies to inform a fair and equitable workplace.

Education

Aug 2016 – Aug 2020	Pennsylvania State University , University Park, PA Ph.D. in Informatics
Aug 2011 – May 2013	Concordia University Wisconsin , Mequon, WI B.A. in Mathematics
Sept 2009 – Jun 2011	Xinjiang University of Finance and Economics , Urumqi, China Undergraduate study in Applied Mathematics

Professional Experience

Jan 2017 – Present	Pennsylvania State University , Graduate Assistant
May 2019 - Aug 2019	Uber Inc. , UX research Intern
Sept 2013 - Dec 2015	Wells Fargo Home Mortgage , Consumer Loan Underwriter

Publications

[C5] **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. (In Prep)

[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]

[C3] **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]

[C2] 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)*.

[C1] 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.

[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.

[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](#)]

Awards & Professional Activities

Student Enrichment Fund within department of IST 18', 19' (travel grant)

Selected to participate in the 2018 [Cornell University Summer School on Designing Technology for Social Impact](#). Ithaca, NY. June 18 - 22, 2018

All Hands on Deck - Open Ocean Fellow, MIT Media Lab. November 2018

Presenter for Proceedings of the 36th annual ACM conference on Human factors in computing systems (CHI 2018). Montreal, Canada. April 21 - 26, 2018

Presenter for Computing Research Association Grad Cohort for Women 2018 Workshop (CRA-W 2018). San Francisco, CA. April 13-14, 2018

Workshop at CHIME, 2018. Montreal, Canada

Workshop at The Future of Work (Places), CSCW 2019. Austin, TX, USA

Reviewer for ACM CSCW 17', 18', 20'; CHI 19', 20'

Teaching Experience

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)
Mentorship	Lilly Rathe (currently at Milwaukee Area Technical College) Ryan Feng (undergraduate at IST) Hannah Goodwin (undergraduate through SROP)

Selected Press

“How Uber drivers feel about being managed by machines” in Forbes, May 2018 [[Link](#)]