

Postdoctoral Fellow Positions in Platform Operations and Data-Driven Market Design, The Chinese University of Hong Kong (Shenzhen)

Position Introduction

We are seeking multiple highly motivated postdoctoral researchers to join an interdisciplinary research team engaged in a close collaboration with a leading global ride-hailing platform. This ambitious project aims to advance our understanding of digital marketplace design by studying the interactions between customers and drivers, as well as the platform's operational and strategic choices.

A defining strength of this collaboration is access to exceptionally rich, high-resolution proprietary data from the platform. This unique dataset supports rigorous empirical analysis and enables high-fidelity modeling and simulation of marketplace dynamics at scale. Research topics span a broad set of questions, including how pricing strategies, incentive structures, dispatch algorithms, and service quality shape the behavior and outcomes of customers, drivers, and the platform itself.

We welcome applicants with strong backgrounds in causal inference, structural estimation, advanced machine learning, and simulation. We are especially interested in scholars eager to apply cutting-edge methods to real-world data to uncover insights that are both academically rigorous and practically actionable. The overarching goal is to inform the design of smarter, more equitable, and more efficient platform ecosystems.

The position will be formally affiliated with the School of Management and Economics at The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen). The postdocs will be supervised by Prof. Yiming Zhang of CUHK-Shenzhen. The research team includes the following faculty from other institutions: Prof. Qiuping Yu (Georgetown), Prof. Yong-Pin Zhou (University of Washington), and Prof. Yunan Ji (Georgetown).

Since 2018, our research team has maintained a close collaboration with this ride-hailing platform. Our prior work has focused on the design and optimization of virtual queuing systems, combining large-scale randomized field experiments with structural modeling to generate actionable insights. Research from this partnership has been published in *Management Science* and received multiple awards, including the MSOM Service Management SIG Best Paper Award, INFORMS Service Science Best Paper Award, and the CSAMSE Best Practice Award. Notably, our recommended strategies were adopted platform-wide and led to an 80% improvement in customer experience.

Research Team

- Prof. Yiming Zhang is an Assistant Professor of Operations Management at the School of Management and Economics, The Chinese University of Hong Kong, Shenzhen. His research focuses on platform operations. He has extensive collaboration experience with platform firms including the ride-sharing, food delivery, and logistics platforms. His work has been published in *Management Science* and has received several best paper awards.
- Prof. Qiuping Yu is an Associate Professor of Operations Management and Business Analytics at Georgetown University's McDonough School of Business. She is also an associate editor for the Manufacturing & Service Operations Management (MSOM) journal. Her research explores how digital and service platforms can improve operational efficiency and equity by harnessing real-world behavioral data from both consumers and workers. She employs a range of methods—including large-scale field experiments, structural modeling, and machine learning—to generate actionable insights on platform design, labor scheduling, and fairness across sectors such as ridesharing, retail, restaurants, customer service, and law enforcement. Her work has been published in leading academic and practitioner outlets, including Management Science, MSOM, Harvard Business Review, and Brookings Research Briefs in Economic Policy, and has been featured in major media such as The Wall Street Journal and Bloomberg Businessweek.

- <u>Prof. Yunan Ji</u> is an Assistant Professor of Strategy at Georgetown University's McDonough School of Business. Her research lies in the intersection of industrial organization and public economics, with a focus on health care markets. Her work has been published in the *Quarterly Journal of Economics, PNAS*, among others.
- <u>Prof. Yong-Pin Zhou</u> is a Professor of Operations Management at the Foster School of Business, University of Washington. His research interests lie in the analytical modeling and data analysis of service systems, with a recent focus on digital platforms. His work has been published in leading journals including *Management Science*, *Operations Research*, *Marketing Science*, and *Manufacturing & Service Operations Management*. He is a recipient of the NSF CAREER Award and multiple best paper awards.

Qualifications:

- 1. A Ph.D. (obtained or soon to be obtained) in Economics, Operations Management, Industrial Engineering, Data Science, Statistics, Computer Science, or a related field.
- 2. Strong training in econometrics and machine learning; proficient programming skills in Python, R, Stata, MATLAB, or similar tools.
- 3. Demonstrated ability or strong potential for publishing research in top-tier academic journals on topics related to platform economy, behavioral decision-making, empirical industrial organization, applied microeconomics, and/or operations research/management.
- 4. Good communication skills and previous experience collaborating with industry is a plus.

Position Details.

Job Position: Post Doc Fellows.

Duration: Two years.

Start Date: As early as is mutually agreeable. Applications will be reviewed on a rolling basis.

Primary Responsibilities:

- 1. Conduct collaborative research within the scope of the project.
- 2. Facilitate communication and coordination with the science, engineering and product teams at the ridesharing platform.
- 3. Disseminate research findings through academic publications, conferences, and policy engagements.

Salary and Fringe Benefits

The annual salary for this position ranges from RMB 470,000 to 580,000 (approximately USD 66,000 to 80,000), commensurate with the candidate's experience and accomplishments. Employee benefits will be provided according to the relevant labor laws of Mainland China as well as CUHK-Shenzhen regulations.

Application Procedure

Interested applicants should submit:

- 1. Cover letter detailing background and interest.
- 2. Curriculum vitae.
- 3. Published and/or working papers (if applicable).
- 4. Two letters of recommendation.

Applications and inquiries should be sent to Prof. Yiming Zhang at zhangyiming@cuhk.edu.cn. Please include <a href="mailto:" "PostdocApplication-[Your Name]" in the email subject line. Review of applications will begin immediately and continue until positions are filled.