# **Chong Bo (Zack) Wang**

Olin Business School Washington University in St Louis St Louis, MO, 63130 +1-314-435-4205 chongbo.wang@wustl.edu www.chongbozackwang.com

# **EDUCATION**

Ph.D. in Quantitative Marketing, Washington University in St. Louis	2019 - 2025 (Expected)
Committee: Tat Chan (Chair), Stephen Nowlis, Dennis Zhang	
M.S. in Operations Research, Columbia University	2014 - 2015
B.A.Sc. in Engineering Science, University of Toronto	2009 - 2014

#### RESEARCH INTERESTS

Substantive: Sharing Economy, Consumer/Supply Engagement, Goal Pursuit

Methodology: Field Experiment, Structural Model, Causal Inference, Machine Learning

#### RESEARCH

# Job Market Paper:

1. "Studying the Supply Behavior in the Ride-Sharing Market", with Tat Chan, Qiyuan Wang, Dennis Zhang

**Abstract:** The sharing economy allows suppliers full autonomy over when and how long they work, creating challenges for managing the supply in response to demand changes. In this study, we investigate key economic and behavioral factors that determine suppliers' daily work decisions within the context of a ride-sharing company. Using a rich dataset from a ride-sharing platform, we develop a structural model that accounts for the full heterogeneity of work costs across individual drivers. We combine a field experiment with observational data to identify the income sensitivity from work costs of drivers. We further introduce a novel nested iteration method in the model estimation to address the computational challenge due to the high dimensionality of the parameter space. Using the estimation results, we conduct a counterfactual analysis to explore how the platform can provide cost-effective subsidies to drivers in response to a temporal demand increase. We show that subsidies based on the time drivers work are costly to the platform because drivers are not very income-sensitive; however, a targeting subsidy schedule based on the cost estimates of individual drivers can help the platform save nearly 50% cost. Our findings highlight the importance of understanding and leveraging driver heterogeneity to improve the profitability of platforms.

#### **Publications:**

2. "The Impact of Government Interventions on Covid-19 Spread and Consumer Spending", with Nan Zhao, Song Yao, Raphael Thomadsen, **Management Science**, 70(5):3302-3318.

# **Working Papers:**

- 3. "Using Field Experiment to Infer Cross-Side Network Effects in the Ride-Sharing Market: How Does the Driver Supply Impact Rider Orders, Cancellations, and Customer Lifetime Value?", with Tat Chan, Qiyuan Wang, Song Yao, *Reject and Resubmit*, Marketing Science
- 4. "The Effect of the Order of Incentive Framing on Performance", with Yanyi Leng, Nan Zhao, Stephen Nowlis, Song Yao, *Under Review*, **Journal of Consumer Psychology**

5. "Income Prediction Bias in the Gig Economy", with Chuck Howard, David Hardisty, Dale Griffin, Working Paper

# TEACHING EXPERIENCE

<b>Teaching</b>	Assistant,	Washing	University	in St Louis

Principles of Marketing (Undergraduate), with Zijun Tian

Marketing Strategy (Master), with Tat Chan

Empirical Method 1 (Ph.D.), with Tat Chan

Fall 2022

A/B Testing in Business and Social Science (Master), with Xiang Hui, Meng Liu

Fall 2020, Fall 2021

#### **INDUSTRY EXPERIENCE**

#### **Part-time:**

Academic Researcher, GoKABU Group, Vancouver, Canada

2020 - 2023

#### **Full-time:**

Equity Research Associate, Macquarie Group, New York, NY
Analytics Fellow, McKinsey & Company, Waltham, MA
2016 - 2017

#### INVITED TALKS AND CONFERENCE PRESENTATIONS

2022: INFORMS Annual Meeting

#### **HONORS AND AWARDS**

Washington University in St. Louis: Doctoral Fellowship

University of Toronto: Graduation with Honours, President's Entrance Scholarship Award in 2009

# ADDITIONAL SKILLS

Programming Languages: AMPL, Assembly, C, C++, Cognos, SQL, Python, VBA

Statistical Software: MATLAB, R, SAS, SPSS

Other Software: Alteryx, ArcGIS, Microsoft Office Suite, SparkBeyond

#### **PERSONAL**

Citizenship: Canada

#### REFERENCES

#### Tat Chan (Chair)

Philip L. Siteman Professor of Marketing Olin Business School chan@wustl.edu

#### **Dennis Zhang**

Associate Professor of Marketing Olin Business School denniszhang@wustl.edu

# **Stephen Nowlis**

August A. Busch Jr. Distinguished Professor of Marketing Olin Business School nowlis@wustl.edu