# YIRAN GONG

Department of Economics, Queen's University Dunning Hall Room 333, 94 University Avenue Kingston, ON, K7L 3N6, Canada Phone: +1 514-677-7191 Email: yiran.gong@queensu.ca Languages: English (proficient), Chinese (native)

#### **EDUCATION**

| Queen's University<br>Ph.D. in Economics                                   | Expected 2024 |
|--|---------------|
| McGill University<br>M.A. in Economics                                     | 2018          |
| <b>Zhejiang University</b><br>B.Sc. in Economics (Honors) - Major: Finance | 2017          |

# **RESEARCH INTEREST**

Industrial Organization, Quantitative Marketing, Applied Econometrics

#### WORKING PAPERS

A Pure Characteristics Approach for Evaluating Welfare Effects from Introducing New Products with Options (Job Market Paper)

Abstract: Structural estimation of welfare effects from new goods largely relies on demand models that include a logit error and the simulation of a counterfactual that removes the new goods. In markets where consumers have both brand preferences and product-type (option) preferences, nested demand models come into play. However, the logit errors in nested logit models not only lead to an inaccurate prediction of shares in the counterfactual but also make welfare estimates sensitive to the number of nests. To deal with these two problems which give rise to implausibly large welfare estimates, I develop an empirical framework to estimate a pure characteristics demand model that allows for option (nest) choices and eliminates the need to rely on logit errors. I then provide an application using scanner data to quantify the welfare effects of four new products simultaneously introduced to the U.S. shampoo market where consumers have strong preferences over options. Results show that consumer welfare increases the most from the shampoo product that offers a niche option. Compared with models featuring logit errors, my approach reduces welfare overestimation by at least 73%. It also provides a better fit and more accurate welfare estimates than the pure characteristics model ignoring options.

Presented at: IIOC 2023 (Rising Stars Session), CEA 2023

Why Do Some New Products Fail? Evidence from the Entry and Exit of Vanilla Coke (with Robert Clark)

**Revised and Resubmitted at:** *Quantitative Marketing and Economics* **Presented at:** CEA 2022 (presenter)

### WORK IN PROGRESS

Estimating the Pure Characteristics Model with Competitive Pricing

#### TEACHING EXPERIENCE

#### **Teaching Fellow**

Queen's University ECON 212: Microeconomic Theory I

**Teaching Assistant** Queen's University Winter 2022, Fall 2022

| Winter 2023            |
|------------------------|
| Fall 2021              |
| Winter 2021            |
| Winter 2020            |
| Fall 2019              |
| Fall 2018, Winter 2019 |
|                        |
| Fall 2017, Winter 2018 |
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### HONORS AND AWARDS

| Queen's University   |   |
|--|---|
| Morgan Brown Scholarship   | 2021                                      |
| Faculty of Arts and Science International Queen's Graduate Award                             | 2021                                      |
| The Christine Morin Fellowship   | 2020                                      |
| Tripp-Smith Family Graduate Fellowship   | 2019                                      |
| Queen's Graduate Award   | 2018-2020                                 |
| International Tuition Award  | 2018-2020                                 |
| McGill University<br>International Research Master's Award<br>Graduate Excellence Fellowship | 2017<br>2017                              |
| <b>Zhejiang University</b><br>Provincial Government Scholarship<br>Excellent Student Awards  | $\begin{array}{c} 2016\\ 2016\end{array}$ |

# SOFTWARE

Stata, MATLAB, R, Python, SAS, LATEX

#### REFERENCES

#### Robert Clark

Professor, Stephen J.R. Smith Chair in Economic Policy Queen's University, Department of Economics Email: rc99@queensu.ca

# Nahim Bin Zahur

Assistant Professor Queen's University, Department of Economics Email: nahim.zahur@queensu.ca

# James G. MacKinnon

Sir Edward Peacock Professor of Econometrics Queen's University, Department of Economics Email: mackinno@queensu.ca