Qian Zhang (Kenneth)

PHD STUDENT · BUSINESS ANALYTICS & OPERATIONS

https://github.com/kennethqianzhang

Education _

University of Pittsburgh

Ph.D. IN BUSINESS ANALYTICS & OPERATIONS

• Advisor: Prof. Arian Aflaki, Prof. Esther Gal-Or

Penn State University

M.A. IN THEORETICAL ECONOMICS

Advisor: Prof. Ran Shorrer

the University of Tokyo

M.A. IN ECONOMICS

• Advisor: Prof. Michihiro Kandori, Prof. Akihiko Matsui

Research Interest

Primary Fields: Customer behavior in operations, revenue management and pricing, information design, platform design, supply chain management, machine learning applications

Methodologies: Game Theory, Optimization, Econometrics, Machine Learning

Publications _____

Published

Zhang, Q., "Mechanism Design Implementation Strategy in Industrial Policy Applications", Book Chapter in "Recent Developments in New Structural Economics: The First Winter Conference of New Structual Economics", by Justin Yifu Lin, etc., Peking University Press, 2016 (In Chinese)

IN REVIEW

- Zhang, Q., w/ Arian Aflaki, Is Your Price Personalized? Alleviating Customer Concerns with Inventory Availability Information, Submitted & Under Review in *Operations Research*
- Zhang, Q., w/ Ran Shorrer, Strategic Application & Preference Submission Timing in Constrained School Choice Matching, Submitted & Under Review in *Game & Economic Behavior*

READY FOR SUBMISSION

Zhang, Q., w/ Arian Aflaki, Review Platform Design with Reference Effects

In Prep

- **Zhang, Q.**, w/Y., Peng, Y., Tao, & Pandu Tadikamalla, A Multi-attribute Group Decision Making Method based on a New Score Function under Hesitant Intuitionistic Fuzzy Linguistic Term Sets Environment
- Zhang, Q., w/ Jinyong Jeong, Dynamic Information Revelation as Matching with Contracts
- Zhang, Q., w/ Esther Gal-Or, Luying Wang, Opitmal Bayesian Persuasion Regulation Design with firm's R&D Incentive
- Zhang, Q., Pattern Recognition for Dividend Forecasting: Deep Learning Approach
- Zhang, Q., School Choice Matching with Incomplete Information on the School Side: Sampling Equilibrium Approach

Pittsburgh, PA 2019.08 - present

State College, PA 2016.08 - 2018.05

Tokyo, JP 2013.04 - 2016.07 Zhang, Q., The Evolution of Preference under OLG Model with Imperfect Information, Probabilistic Election and Coalition

Teaching Experience _____

Spring 2023	Data Mining (Graduate Level), Instructor	University of Pittsburgh
	Evaluations: 4.74/5, with response rate 52.63%,	
	Master of Science Student Choice Awards for Outstanding Teaching,	
Fall 2021	Statistical Analysis (Graduate Level), Instructor	University of Pittsburgh
	Evaluations: 4.70/5, with response rate 63.16% ,	
Fall 2023	Applied Economics (Executive Doctor of Business Administration), Teaching Assistant	
Fall 2022	Quantitative Research Methods (Executive Doctor of Business Administration), Teaching Assistant	
Spring 2022	Statistical Analysis (Graduate Level), Teaching Assistant	
Fall 2021	Statistical Analysis (Graduate Level), Teaching Assistant	
Spring 2021	Data Mining (Graduate Level), Teaching Assistant	
Spring 2021	Decision Technology in Operations Management (Graduate Level), Teaching Assistant	
Spring 2021	Statistical Analysis (Graduate Level), Teaching Assistant	
Fall 2020	Statistical Analysis (Graduate Level), Teaching Assistant	
Fall 2017	Development Economics (Undergraduate Level), Teaching Assistant	Penn State
Spring 2017	Microeconomics (Undergraduate Level), Teaching Assistant	
Spring 2016	International Econmoics (Undergraduate Level), Teaching Assistant	
Spring 2016	Advanced Microeconomics (Graduate Level), Teaching Assistant	U-Tokyo
Fall 2015	Microeconomics (Undergraduate Level), Teaching Assistant	-
Fall 2015	Mathematical Economics (Graduate Level), Teaching Assistant	
Spring 2015	Advanced Microeconomics (Graduate Level), Teaching Assistant	

Presentations _____

* presenting author

1. IS YOUR PRICE PERSONALIZED? ALLEVIATING CUSTOMER CONCERNS WITH INVENTORY AVAILABILITY INFOR-MATION

*2023 INFORMS Annual Meeting (2023 October, Pheonix AZ, USA)

2023 INFORMS Annual Revenue Management & Pricing (RMP) Section Conference (2023 July, London, UK)

*2023 MSOM Annual Conference (2023 June, Montreal, Canada)

*2023 POMS Annual Conference (2023 May, Orlando FL, USA)

*2022 DSI Annual Conference (2022 November, Houston TX, USA)

2. PRICING & RATING SYSTEM DESIGN WITH REFERENCE EFFECT

*2023 DSI Annual Meeting (2023 November, Atlanta GA, USA)

3. MECHANISM DESIGN IMPLEMENTATION STRATEGY IN INDUSTRIAL POLICY APPLICATIONS

*2015 New Structural Economics Annual Conference (2015 December, Beijing China)

4. THE EVOLUTION OF PREFERENCE UNDER OLG MODEL WITH IMPERFECT INFORMATION, PROBABILISTIC ELEC-TION AND COALITION

*2016 Japanese Game Theory Annual Conference (2016 February, Tokyo JP)

*2015 University of Tokyo Microeconomics Seminar (2015 October, Tokyo JP)

Awards, Fellowships, & Grants

2023	Master of Science Student Choice Awards for Outstanding Teaching, University Pittsburgh Dean's PhD Merit Scholar, University of Pittsburgh	[,] of
2022	Sheth PhD Fellowship, Sheth Foundation Dean's PhD Merit Scholar, University of Pittsburgh	
2021	Geroge G. Main Fellowship, University of Pittsburgh	
2019 - 2020	Myra G. Mervis Fellowship, University of Pittsburgh	
2016 - 2018	Teaching Assistant Scholarship, Penn State University	
2016	Annual Research Grant (DC 1), Japan Society for the Promotion of Science (JSPS Special Research Fellowship, Japan Society for the Promotion of Science (JSPS) Research Assistant Scholarship, the University of Tokyo	
2015	Scholarship for Academic Excellence, the University of Tokyo Teaching Assistant Scholarship, the University of Tokyo	
Industria	l Experience & Services	
Media Refe	•	
	ng the Prices While Keeping Customers Happy Reg Blog, Sponsored by the Duke Financial Economics Center, January 2023	
Industrial	Experience	
Gusto		Remote
RESEARCH SC	ientist/Data Competition Project	2022.05 - 2022.08
• Initiated ar	nd created the real-time-post-leads Conversion Score Prediction model for R&D Tax C	redit
Bloomberg	L.P.	Tokyo, JP
DATA SCIENT	IST/SPECIALIST	2018.05 - 2019.07
Initiated a curacy byParticipate	of BDVD (Dividend Forecasting) product for Japan Market, covering more than 3,000 . nd led the Dividend Forecasting global expansion project, increased global coverage 41% using Machine Learning models such as RNN, LSTM, and Time Series models ed in News Headline and Material Automation using NLP models, such as RoBERTa m	e from 8,000 to 21,000 and ac- nodel
	l pattern recognition and forecasting model analysis for various financial products suing process evaluation with non-linear patterns	ich as Index Membership and
	ty for the Promotion of Science(JSPS)	Tokyo, JP
-	Arch Fellow (DC 1)	2015.04 - 2016.07
Conducted	l theoretical research on the Industrial Policy implementation mechanism in Japan a d a mathematical model to build the structured hypothesis for examining the effects o	nd China

policy implementation mechanisms on firms' technological competitive advantage • Collected and analyzed data using Econometrics and Causal Inference models

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