Zhe "Jeffrey" Liu

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RESEARCH INTERESTS
Revenue management and pricing, supply chain management, business analytics

EDUCATION

Columbia University, Graduate School of Business   New York, NY
- Ph.D. Candidate in Decision, Risk and Operations   2013–2019
- Advisors: Awi Federgruen, Costis Maglaras

Tsinghua University   Beijing, China
- B.S. in Industrial Engineering, GPA: 95/100 (ranks 2/62)   2009–2013
- Advisor: Zuo-Jun Max Shen

JOURNAL PUBLICATIONS

Ride-Hailing Networks with Strategic Drivers: The Impact of Platform Control Capabilities on Performance, *MSOM*, major revision. (with Philipp Afèche and Costis Maglaras) An interactive visualization of NYC taxi flows (web link): NYC Taxi Map

A Synthesis and Generalization of Structural Results in Inventory Management: Generalized Convexity Properties, *Math of OR*, forthcoming. (with Awi Federgruen and Lijian Lu)

Dual Sourcing under Capacity Limits, Fixed Costs and Salvage Opportunities, *MSOM*, major revision. (with Awi Federgruen and Lijian Lu)

WORKING PAPERS

Surge Pricing and Dynamic Matching for Hotspot Demand Shock in Ride-Hailing Networks, *in preparation*. (with Philipp Afèche and Costis Maglaras)

Multistage Stochastic Mixed-Integer Programs for Optimizing Gas Contract and Maintenance Scheduling, 2012. (with Siqian Shen)

OTHER PUBLICATIONS

Inventory Strategies for Service-Sensitive Demands, *Undergraduate Thesis*, 2013. (Advisor: Zuo-Jun Max Shen)

Service Parts Demand Forecasting and Multi-Echelon Inventory Network Design, *Research Report for Caterpillar Logistics*, 2013. (with K. Wang, W. Zhu and X. Zhao)

Intermittent Demand Forecasting of Slow Moving Parts, *Tsinghua University Student Journal*, 4(2): 34-49, 2012. (with Jialing Tao and Yi Yang)

CASES WRITTEN
ILUMÉXICO: A Built-for-Assembly Supply Chain Strategy, *Columbia CaseWorks*, ID: 170203, 2017. (with Awi Federgruen and Abigail Talcott-Schlaifer)

WORK EXPERIENCE
Research Scientist Intern, Amazon, Seattle   June–Aug. 2018

TEACHING EXPERIENCE

Instructor
- MBA Excel Workshop—Advanced Level   Spring/Fall 2015–2017
- Intro to Spreadsheet Optimization and Simulation (MSE master)   Fall 2016–2017

Teaching Assistant
- Business Analytics (MBA/EMBA core, MSE master)   2014–2016
- Managerial Statistics (MBA/EMBA core)   2014–2018
- Operations Management (MBA/EMBA core)   2016–2019
- Corporate Finance (EMBA core)   2015
- Mathematical Methods (Marketing master)   2015–2018
- Supply Chain Management (MSE master)   2016–2018
- Operations Strategy (MBA elective)   2014

HONORS AND AWARDS	• 2nd Place, POMS-HK Best Student Paper Competition, 2019
	• Finalist, George Nicholson Student Paper Competition, 2018
	• 2nd Place, POMS College of SCM Student Paper Competition, 2018
	• Doctoral Fellow Presentation at Deming Cup Award Ceremony, 2018
	• Chazen Institute for Global Business Research Award, 2018
	• MSOM Service SIG Invited Talk (8/66 submissions), 2018
	• MSOM Supply Chain Management SIG Invited Talk (8/43 submissions), 2018
	• Deming Doctoral Research Fellowship, 2016
	• Deming Doctoral Research Fellowship, 2015
	• Doctoral Fellowship, Columbia Business School, 2013–2018
	• Tsinghua University Outstanding Undergraduate Student Award, 2013.
	• Beijing Outstanding Undergraduate Student Award, 2013.
	• President Jiang Nan-Xiang Scholarship, Tsinghua University, 2012.
	• 1st Place, 30th Tsinghua Challenge Cup Research and Innovation Contest, 2012.
	• Changhong Scholarship, Tsinghua University, 2011.
	• Outstanding Prize (Top 4/8000) in 27th National College Physics Contest, 2011.
	• OOCL Scholarship, Tsinghua University, 2010.

SERVICES   Referee for *Manufacturing & Service Operations Management* and *Management Science*

INVITED SEMINARS
- University College London, School of Management — 2019
- Imperial College London, Imperial College Business School — 2019
- University of Toronto, Rotman School of Management — 2019
- University of Miami, Miami Business School — 2019
- Indiana University, Kelley School of Business — 2019
- University of Hong Kong, Faculty of Business and Economics — 2019
- City University of Hong Kong, College of Business — 2019
- Hong Kong University of Science and Technology, HKUST Business School — 2019
- Northwestern University, Kellogg School of Management — 2018

CONFERENCE TALKS

"A Tale of Timescales: Surge Pricing and Dynamic Matching for Hotspot Demand Shock in Ride-Hailing Networks"
- INFORMS RMP Annual Conference, Stanford, CA — June 2019
- INFORMS Annual Meeting, Phoenix, AZ — Nov. 2018
- MSOM Annual Conference, Dallas, TX — July 2018
- INFORMS RMP Annual Conference, Toronto, Canada — June 2018
- INFORMS Annual Meeting, Houston, TX — Oct. 2017

"Ride-Hailing Networks with Strategic Drivers: The Impact of Platform Control Capabilities on Performance"
- INFORMS Annual Meeting, Phoenix, AZ — Nov. 2018
- MSOM Service SIG Meeting, Dallas, TX — July 2018
- INFORMS Annual Meeting, Houston, TX — Oct. 2017
- MSOM Annual Conference, Chapel Hill, NC — June 2017
- Marketplace Innovation Workshop, Stanford, CA — June 2017
- Deming Doctoral Fellow Seminar, New York, NY — April 2017
- INFORMS Annual Meeting, Nashville, TN — Nov. 2016
- INFORMS RMP Annual Conference, New York, NY — June 2016

"A General Dual Sourcing Inventory Model: Trading Off Lead Time and Cost Differences"
- POMS-HK International Conference, Hong Kong — Jan. 2019
- MSOM Annual Conference, Dallas, TX — July 2018
- POMS Annual Conference (Student Paper Competition), Houston, TX — May 2018
- Amazon Supply Chain Optimization Summit (Poster), Seattle, WA — Oct. 2017

- CSAMSE Annual Conference, Guangzhou, China   July 2017
- INFORMS Annual Meeting, Nashville, TN   Nov. 2016
- MSOM Annual Conference, Auckland, New Zealand   July 2016
- Trans-Atlantic Doctoral Conference, London, UK   May 2016
- Deming Doctoral Fellow Seminar, New York, NY   April 2016

"Generalized Convexity Properties: A Synthesis and Generalization of Structural Results in Inventory Management"

- INFORMS Annual Meeting (George Nicholson Student Paper Competition), Phoenix, AZ   Nov. 2018
- MSOM Supply Chain Management SIG Meeting, Dallas, TX   July 2018
- INFORMS Annual Meeting, Nashville, TN   Nov. 2016
- MSOM Annual Conference, Auckland, New Zealand   July 2016

COMPUTER SKILLS

Languages: Mathematica, Python, C/C++, Java, R, VB, SQL
Software and tools: ILOG CPLEX, FICO Xpress, GAMS, LINGO, AnyLogic
Web development: Django Framework, HTML, Javascript, CSS

REFERENCES

Professor Awi Federgruen
Decision, Risk and Operations
Graduate School of Business
Columbia University
New York, NY, USA
E-mail: af7@gsb.columbia.edu

Professor Costis Maglaras
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Graduate School of Business
Columbia University
New York, NY, USA
E-mail: c.maglaras@gsb.columbia.edu

Professor Philipp Afèche
Operations Management and Statistics
Rotman School of Management
University of Toronto
Toronto, ON, Canada
E-mail: philipp.afeche@rotman.utoronto.ca

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