

# Curriculum Vitae

## Cong SHI

### Contact Information

Department of Industrial and Operations Engineering, University of Michigan at Ann Arbor  
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### Education

**Massachusetts Institute of Technology (MIT)**, Cambridge, MA, USA 9/2007 - 8/2012  
Ph.D. in Operations Research (Thesis Advisor: Professor Retsef Levi)

**National University of Singapore (NUS)**, Singapore 9/2003 - 6/2007  
B.S. in Applied Mathematics (First Class Honors)

**University of California, Berkeley**, Berkeley, CA, USA 1/2006 - 8/2006  
Education Abroad Program (EAP) Reciprocity Student

### Professional Experiences

**University of Michigan**, Ann Arbor, MI, USA 9/2019 - Present  
Associate Professor (with Tenure), Department of Industrial & Operations Engineering

**University of Michigan**, Ann Arbor, MI, USA 9/2012 - 8/2019  
Assistant Professor, Department of Industrial & Operations Engineering

**IBM Research Laboratory at Zurich**, Rüschlikon, Switzerland 6/2010 - 9/2010  
Research Fellow (Summer Intern)

**Motorola Solutions Venture Capital**, Sunnyvale, CA, USA 6/2006 - 9/2006  
Quantitative Analyst (Summer Intern)

**Citigroup Global Markets**, Singapore 6/2005 - 9/2005  
Quantitative Analyst (Summer Intern)

### Awards - Research

**Finalist, INFORMS APS Best Student Paper, 2019 (student entrant: Hao Yuan)**

**Finalist, INFORMS MSOM Data Driven Research Challenge, 2018**

**Third Place, INFORMS Junior Faculty Forum Paper Competition (JFIG), 2017**

**First Place, INFORMS George E. Nicholson Student Paper Competition, 2009**

### Awards - Teaching and Services

**IOE Graduate Course Professor of the Year (voted on by students), 2019**

**The CoE Vulcans Education Excellence Award, University of Michigan, 2019**

**INFORMS Management Science Meritorious Service Award, 2019**

**INFORMS Management Science Meritorious Service Award, 2018**

## Research Interests

**Theory:** Approximation Algorithms, Online Learning Algorithms, Algorithmic Game Theory

**Applications:** Supply Chain Management, Revenue Management, Service Operations

## Refereed Journal Publications

(Authors underlined are Ph.D. students; authors underlined and asterisked are undergraduate students\*.)

1. R. Levi, G. Perakis, C. Shi, W. Sun, “Strategic Capacity Planning Problems in Revenue Sharing Joint Ventures”, **Production and Operations Management**, to appear.
2. E. Keyvanshokoh, C. Shi, M. P. Van Oyen, “Online Advance Scheduling with Overtime: A Primal-Dual Approach”, **Manufacturing & Service Operations Management**, to appear.
3. H. Zhang, X. Chao, C. Shi, “Closing the Gap: A Learning Algorithm for the Lost-sales Inventory System with Lead Times”, **Management Science**, to appear.
4. Y. Chen, C. Shi, “Joint Pricing and Inventory Management with Strategic Customers”, **Operations Research**, to appear.  
(Third Place, **INFORMS Junior Faculty Forum Paper Competition (JFIG), 2017.**)
5. C. Shi, Y. Wei, Y. Zhong, “Process Flexibility for Multi-Period Production Systems”, **Operations Research**, Vol. 67(5), 1300-1320, 2019.
6. Y. Jiang, C. Shi, S. Shen, “Service Level Constrained Inventory Systems”, **Production and Operations Management**, Vol. 28(9), 2365-2389, 2019.
7. H. Zhang, X. Chao, C. Shi, “Perishable Inventory Systems: Convexity Results for Base-Stock Policies and Learning Algorithms under Censored Demand”, **Operations Research**, Vol. 66(5), 1276-1286, 2018.
8. X. Chao, X. Gong, C. Shi, C. Yang, H. Zhang, S. X. Zhou, “Approximation Algorithms for Capacitated Perishable Inventory Systems with Positive Lead Time”, **Management Science**, Vol. 64(11), 5038-5061, 2018.
9. Y. Chen, R. Levi, C. Shi, “Revenue Management of Reusable Resources with Advanced Reservations”, **Production and Operations Management**, Vol. 26(5), 836-859, 2017.
10. Y. Jiang, J. Xu\*, S. Shen, C. Shi, “Production Planning Problem with Joint Service-Level Guarantee: A Computational Study”, **International Journal of Production Research**, Vol. 55(1), 38-58, 2017.
11. Y. Xu, C. Shi, I. Duenyas, “Priority Rules for Multi-Task Due-Date Scheduling under Varying Processing Costs”, **Production and Operations Management**, Vol. 25(12), 2086-2102, 2016.
12. H. Zhang, C. Shi, C. Qin\*, C. Hua\*, “Stochastic Regret Minimization for Revenue Management Problems with Nonstationary Demands”, **Naval Research Logistics**, Vol. 63(6), 433-448, 2016.
13. V. Nagarajan, C. Shi, “Approximation Algorithms for Inventory Problems with Submodular or Routing Costs”, **Mathematical Programming Series A**, Vol. 160(1), 225-244, 2016.
14. M. Yu, Y. Ding, R. Lindsey, C. Shi, “A Data-Driven Approach to Manpower Planning at U.S.-Canada Border Crossings”, **Transportation Research Part A: Policy and Practice**, Vol. 91, 34-47, 2016.
15. H. Zhang, C. Shi, X. Chao, “Approximation Algorithms for Perishable Inventory Systems with Setup Costs”, **Operations Research**, Vol. 64(2), 432-440, 2016.
16. C. Shi, W. Chen, I. Duenyas, “Nonparametric Data-Driven Algorithms for Multiproduct Inventory Systems with Censored Demand”, **Operations Research**, Vol. 64(2), 362-370, 2016.

17. X. Chao, X. Gong, C. Shi, H. Zhang, “Approximation Algorithms for Perishable Inventory Systems”, **Operations Research**, Vol. 63(3), 585-601, 2015.
18. C. Shi, H. Zhang, C. Qin\*, “A Faster Algorithm for the Resource Allocation Problem with Convex Cost Functions”, **Journal of Discrete Algorithms**, Vol. 34, 137-146, 2015.
19. C. Shi, H. Zhang, X. Chao, R. Levi, “Approximation Algorithms for Capacitated Stochastic Inventory Systems with Setup Cost”, **Naval Research Logistics**, Vol. 61(4), 304-319, 2014.
20. R. Levi, C. Shi, “Approximation Algorithms for the Stochastic Lot-Sizing Problem with Order Lead Times”, **Operations Research**, Vol. 61(3), 593-602, 2013.  
(**First Place, INFORMS George E. Nicholson Student Paper Competition, 2009.**)

## Papers under Revision

21. B. Chen, X. Chao, C. Shi, “Nonparametric Learning Algorithms for Joint Pricing and Inventory Control with Lost-Sales and Censored Demand”, Minor Revision, **Mathematics of Operations Research**.
22. W. Chen, C. Shi, I. Duenyas, “Optimal Learning Algorithms for Stochastic Inventory Systems with Random Capacities”, Major Revision, **Production and Operations Management**.
23. H. Yuan, Q. Luo, C. Shi, “Marrying Stochastic Gradient Descent with Bandits: Learning Algorithms for Inventory Systems with Fixed Costs”, Major Revision, **Management Science**.  
(**Finalist, INFORMS APS Best Student Paper, 2019.**)

## Papers under Review

24. M. Li, X. Liu, Y. Huang, C. Shi, C. Hua, “Integrating Empirical Estimation and Assortment Personalization for E-Commerce: A Consider-then-Choose Model”. Preprint.  
(**Finalist, The 2018 MSOM Data Driven Research Challenge, 2018.**)
25. Y. Chen, C. Shi, “Near-Optimal Pricing Policy for Service Systems with Reusable Resources and Forward-Looking Customers”. Preprint.
26. Y. Chen, C. Shi, “Network Revenue Management with Online Inverse Batch Gradient Descent Method”. Preprint.
27. M. Zhalechian, E. Keyvanshokoo, C. Shi, M. P. Van Oyen, “Personalized Hospital Admission Control: A Contextual Learning Approach.” Preprint.
28. B. Chen, C. Shi, “Tailored Base-Surge Policies in Dual-Sourcing Inventory Systems with Demand Learning”. Preprint.

## Refereed Conference Proceedings

1. Y. Chen, C. Shi, “Joint Pricing and Inventory Management with Strategic Customers”, *Proceedings of the 18th ACM Conference on Economics and Computation*, **EC’17**, 2017, MIT, Cambridge, MA.
2. X. Chao, X. Gong, C. Shi, C. Yang, H. Zhang, S. X. Zhou, “Approximation Algorithms for Capacitated Perishable Inventory Systems with Positive Lead Times”, *Proceedings of the Supply Chain Management SIG Conference, MSOM 2016*, Auckland, NZ.

## Refereed Book Chapters

1. C. Shi, “Approximation Algorithms for Stochastic Optimization Problems in Operations Management”, *Wiley Encyclopedia of Operations Research and Management Sciences*, edited by J. J. Cochran, Wiley, Hoboken, NJ.

## Research Grants

1. **National Science Foundation, CMMI-1634505, PI** 9.2016 - 8.2019  
Nonparametric Sampling-Based Algorithms for Supply Chain Systems, \$290K
2. **National Science Foundation, CMMI-1451078, PI** 9.2014 - 8.2016  
Sustainability in Supply Chain: An Innovative and Systemic Approach, \$273K
3. **National Science Foundation, CMMI-1362619, Co-PI (with PI X. Chao)** 6.2014 - 5.2017  
Managing Perishable Inventory Systems: New Algorithms and Approximations,  
\$375K (my share: \$160K)
4. **Mcubed, University of Michigan, PI** 9.2016 - 9.2017  
Integrating Review Information with Pricing, with R. Kapuscinski and R. Jiang, \$60K
5. **Mcubed, University of Michigan, PI** 9.2013 - 9.2014  
Distribution Free Inventory Control for Supply Chains, with I. Duenyas and Y. A. Bozer, \$60K

## Professional Activities

### Editorial Services

- **Senior Editor**, *Production and Operations Management*, 2019 – Present
- **Associate Editor**, *IIE Transactions*, 2017 – Present
- **Associate Editor**, *Operations Research Letters*, 2015 – Present
- Journal Reviewer for *Operations Research*, *Management Science*, *Mathematics of Operations Research*, *Mathematical Programming*, *Manufacturing & Service Operations Management*, *Production and Operations Management*, *INFORMS Journal on Computing*, *Stochastic Systems*, *Naval Research Logistics*, *IIE Transactions*, *Operations Research Letters*, *International Journal of Production Research*, *Computers & Operations Research*, *A Quarterly Journal of Operations Research*, *European Journal of Operations Research*, *Flexible Services and Manufacturing*, *International Transactions in Operational Research*
- Conference Reviewer for *ACM-SIAM Symposium on Discrete Algorithms (SODA)*, *European Symposia on Algorithms (ESA)*, *MSOM Conference Proceedings*.
- Book Reviewer for *Advances and Trends in Optimization with Engineering Applications by Society for Industrial and Applied Mathematics (SIAM)*.

### Extramural Services

- Track Chair for the Supply Chain Special Interest Group (SIG) for INFORMS Annual Meeting, 2020
- Invited Judge, INFORMS Junior Faculty Forum (JFIG) Paper Competition, 2019
- Invited Judge, POMS Supply Chain College Student Paper Competition, 2016, 2017, 2018, 2019
- Invited Judge, POMS College of Healthcare Operations Management Paper Competition, 2018, 2019, 2020
- External Reviewer, Research Grants Council (RGC) of Hong Kong, 2019
- INFORMS Annual Conference Session Chairs, 2014, 2015, 2016, 2017, 2018
- INFORMS International Conference Session Chair, 2016
- POMS Annual Conference Session Chairs, 2015
- National Science Foundation DRMS CAREER Grant Reviewer, September 2016.
- National Science Foundation CMMI Grant Panelist, December 2013.
- Membership of INFORMS, MSOM, Optimization Society, Applied Probability Society (APS).

## Internal Services at IOE and COE

- IOE Review Committee for Reza Kamaly (Lecturer), 2019
- IOE Curriculum Committee, 2019
- IOE Graduate Program Committee, 2019
- IOE Faculty Search Committee, 2019
- IOE First-Year Ph.D. Advisor, 2019
- IOE Wilson Prize Committee, 2019
- IOE Undergraduate Program Computing and Data Science Task Force, 2019
- IOE Review Committee for Luis Guzman (Lecturer), 2018
- IOE Departmental Committee, 2018-2019
- IOE Murty Prize Committee and IOE Wilson Prize Committee, 2018
- IOE Internal Review Committee (formed by the College of Engineering), 2018
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2017–2018
- IOE Murty Prize Committee, 2017
- IOE Review Committee for Dan Reaume (Lecturer), 2017
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2016–2017
- IOE Ph.D. Preliminary Exam Coordinator (Operations Research), 2016
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2015–2016
- IOE Ph.D. Preliminary Exam Coordinator (Operations Research), 2015
- IOE Ph.D. Qualifying Exam Coordinator (Stochastic Models), 2015
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2014–2015
- IOE Departmental Committee, 2014-2015
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2013–2014
- IOE Graduate Admissions and Financial Aid (GAFA) Committee, 2012–2013
- IOE Seminar Series Coordinator (11 External Speakers), Fall 2013
- Ph.D. Prelim Committee Member for more than 20 Ph.D. students (Hideaki Nakao, Elnaz Kabir, Esmail Keyvanshokoh, Alejandro Vigo, Fatemeh Navidi, Qi Luo, Sentao Miao, Francisco Aldarondo, Nima Salehi, Armando Bernal, Yuchen Jiang, Huanan Zhang, Weidong Chen, Hao Yuan, Amirhossein Meisami, Abdullah Al-Shelahi, Zhihao Chen, Yuanyuan Guo, Elliot Lee, Xiang Liu, Jingxing Wang, Emily Speakman, Patrick Nestor)

## Invited Seminars at Peer Institutions

1. “Network Revenue Management with Online Inverse Batch Gradient Descent Method”, Zhejiang University, International Symposium on Revenue Management, Summer 2019.
2. “Marrying Stochastic Gradient Descent with Bandits: Learning Algorithms for Inventory Systems with Fixed Costs”, Chinese University of Hong Kong, Shenzhen, MOSTLY OM Workshop, Summer 2019.
3. “Closing the Gap: A Learning Algorithm for the Lost-sales Inventory System with Lead Times”, Institute for Mathematics and its Applications, University of Minnesota, Fall 2018.
4. “Closing the Gap: A Learning Algorithm for the Lost-sales Inventory System with Lead Times”, Tsinghua University, MOSTLY OM Workshop, Summer 2018.
5. “Nonparametric Learning Algorithms for Inventory and Pricing Models”, Cornell University, ORIE Seminar Series, Fall 2017.
6. “Nonparametric Learning Algorithms for Inventory and Pricing Models”, Northwestern University, IEMS Seminar Series, Spring 2017.
7. “Nonparametric Learning Algorithms for Inventory and Pricing Models”, University of Illinois at Urbana-Champaign (UIUC), ISE Seminar Series, Spring 2017.
8. “Nonparametric Learning Algorithms for Inventory and Pricing Models”, Columbia University, IEOR-DRO Seminar Series, Spring 2017.
9. “Nonparametric Learning Algorithms for Perishable Inventory Systems”, Georgia Institute of Technology, ISyE Seminar Series, Spring 2016.
10. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, Columbia University, IEOR Seminar Series, Spring 2012.
11. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, University of Michigan, IOE Seminar Series, Spring 2012.
12. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, University of British Columbia, Sauder School of Business Seminar Series, Spring 2012.
13. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, Rutgers University, Rutgers Business School Seminar Series, Spring 2012.
14. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, University of Rochester, Simon School of Business Seminar Series, Spring 2012.
15. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, National University of Singapore, Decision Sciences Seminar Series, Spring 2012.
16. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, Singapore Management University, LKC Business School Seminar Series, Spring 2012.
17. “Algorithmic Approaches for Multi-Stage Stochastic Optimization Problems”, Chinese University of Hong Kong, Business School Seminar Series, Spring 2012.
18. “Approximation Algorithms for the Stochastic Lot-sizing Problem”, Massachusetts Institute of Technology, Operations Management Seminar Series, Spring 2008.

## Invited or Peer-Reviewed Conferences

1. “Network Revenue Management with Online Inverse Batch Gradient Descent Method”, INFORMS RMP Conference 2019, Stanford University, Stanford, CA.
2. “Optimal Learning Algorithms for Stochastic Inventory Systems with Fixed Cost”, POMS Annual Conference 2019, Washington, D.C.
3. “Advance Online Scheduling with Overtime: A Primal-Dual Approach”, POMS Annual Conference 2019, Washington, D.C.
4. “Online Advance Scheduling with Overtime: A Primal-Dual Approach”, MSOM Conference 2018, UTD, Dallas, TX.
5. “Nonparametric Learning Algorithms for Inventory and Pricing Models”, INFORMS Annual Conference 2017, Houston, TX.
6. “Managing Multi-Period Production Systems With Limited Process Flexibility”, MSOM Conference 2017, UNC, Chapel Hill, NC.
7. “Closing the Gap: A Learning Algorithm for the Lost-Sales Inventory System with Lead Times”, MSOM Conference 2017, UNC, Chapel Hill, NC.
8. “Closing the Gap: A Learning Algorithm for the Lost-Sales Inventory System with Lead Times”, POMS Annual Conference 2017, Seattle, WA.
9. “Joint Pricing and Inventory Management with Strategic Customers”, The Tenth Annual International Conference of the Chinese Scholars Association for Management Science and Engineering (CSAMSE 2017), Sun Yat-sen University, Guangzhou, China.
10. “Joint Pricing and Inventory Management with Strategic Customers”, POMS-HK Conference 2017, Hong Kong.
11. “Process Flexibility for Multi-Period Production Systems”, INFORMS APS Annual Conference 2017, Northwestern University, Evanston, IL.
12. “Joint Pricing and Inventory Management with Strategic Customers”, INFORMS Annual Conference 2016, Nashville, TN.
13. “Closing the Gaps: An Online Learning Algorithm For Lost-Sales Inventory Systems with Lead Times”, INFORMS Annual Conference 2016, Nashville, TN.
14. “Nonparametric Learning Algorithms for Optimal Base-stock Policy in Perishable Inventory Systems”, INFORMS Annual Conference 2016, Nashville, TN.
15. “Nonparametric Data-Driven Algorithms for Capacitated Inventory Systems”, INFORMS Annual Conference 2016, Nashville, TN.
16. “Managing Multi-Period Production Systems with Limited Process Flexibility”, INFORMS Annual Conference 2016, Nashville, TN.
17. “Efficiency of Capacity Investment Decisions in Revenue Sharing Joint Ventures with Spillovers”, INFORMS RMP Conference 2016, New York University, New York, NY.
18. “Nonparametric Algorithms for Stochastic Inventory Systems”, INFORMS International 2016, Hawaii.
19. “Approximation Algorithms for Capacitated Perishable Inventory Systems with Positive Lead Times”, POMS-HK Conference 2016, Macau.

20. “Nonparametric Algorithms for Joint Pricing and Inventory Control with Lost-sales and Censored Demand”, INFORMS Annual Conference 2015, Philadelphia, PA.
21. “Managing Multi-Period Production Systems with Limited Process Flexibility”, INFORMS Annual Conference 2015, Philadelphia, PA.
22. “Nonparametric Data-Driven Algorithms for Multi-Product Inventory Systems”, INFORMS Annual Conference 2015, Philadelphia, PA.
23. “A Faster Algorithm for the Resource Allocation Problem with Convex Cost Functions”, INFORMS Annual Conference 2015, Philadelphia, PA.
24. “Nonparametric Data-Driven Algorithms for Multi-Product Inventory Systems”, 22nd ISMP 2015, Pittsburgh, PA.
25. “Process Flexibility for Multi-Period Production Systems”, INFORMS APS Annual Conference 2015, Turkey.
26. “Nonparametric Data-Driven Algorithms for Multi-Product Inventory Systems”, POMS Annual Conference 2015, Washington, D.C.
27. “Nonparametric Data-Driven Algorithms for Multi-Product Inventory Systems”, IIE Annual Conference 2015, Nashville, TN.
28. “Efficiency of Revenue Sharing Joint Ventures with Capacity Investment Decisions”, INFORMS Annual Conference 2014, San Francisco, CA.
29. “Efficiency of Revenue Sharing Joint Ventures with Capacity Investment Decisions”, SIAM Optimization 2014, San Diego, CA.
30. “Approximation Algorithms for Capacitated Stochastic Inventory Systems with Setup Cost”, MSOM Conference 2013, INSEAD, France.
31. “Efficiency of Revenue Sharing Joint Ventures with Capacity Investment Decisions”, INFORMS Annual Conference 2013, Minneapolis, MN.
32. “Approximation Algorithms for Capacitated Stochastic Inventory Systems with Setup Cost”, INFORMS Annual Conference 2013, Minneapolis, MN.
33. “Approximation Algorithms for Perishable Inventory Systems”, INFORMS Annual Conference 2013, Minneapolis, MN.
34. “Optimal Contract Design for Joint-ventures in the Healthcare Industry”, MSOM Conference 2012, Columbia University, New York, NY.
35. “Revenue Management of Reusable Resources with Advanced Reservations”, INFORMS Annual Conference 2012, Phoenix, AZ.
36. “Revenue Management of Reusable Resources with Advanced Reservations”, 21st ISMP 2012, TU Berlin.
37. “Revenue Management of Reusable Resources with Advanced Reservations”, MSOM Conference 2011, University of Michigan, Ann Arbor, MI.
38. “Revenue Management of Reusable Resources with Advanced Reservations”, INFORMS Annual Conference 2011, Charlotte, NC.
39. “Optimal Contract Design for Joint-Ventures in the Healthcare Industry”, INFORMS Annual Conference 2011, Charlotte, NC.
40. “Revenue Management of Reusable Resources with Advanced Reservations”, INFORMS Annual Conference 2010, Austin, TX.



41. “Approximation Algorithms for the Stochastic Lot-sizing Problem”, MSOM Conference 2009, MIT, Cambridge, MA.
42. “Approximation Algorithms for the Stochastic Lot-sizing Problem”, INFORMS Annual Conference 2009, San Diego, CA.
43. “Approximation Algorithms for the Stochastic Lot-sizing Problem”, 20th ISMP 2009, University of Chicago.
44. “Approximation Algorithms for the Stochastic Lot-sizing Problem”, INFORMS Annual Conference 2008, Washington, D.C.

## Ph.D. Students Supervised

1. **Dr. Huanan Zhang** (co-advised with Professor X. Chao), IOE, University of Michigan, 2012 – 2017  
Dissertation: Data-Driven Algorithms for Stochastic Supply Chain Systems: Approximation and Online Learning  
Defense Date: April 20, 2017  
First Position: Assistant Professor, Harold and Inge Marcus Department of Industrial and Manufacturing Engineering, Penn State University
2. **Dr. Yuchen Jiang** (co-advised with Professor S. Shen), IOE, University of Michigan, 2013 – 2018  
Dissertation: Supply Chain and Revenue Management for Online Retailing  
Defense Date: February 16, 2018  
First Position: Data Scientist, Uber, San Francisco, CA
3. **Dr. Weidong Chen** (co-advised with Professor I. Duenyas), IOE, University of Michigan, 2014 – 2019  
Dissertation: Online Learning Algorithms for Stochastic Inventory and Queueing Systems  
Defense Date: March 14, 2019  
First Position: Data Scientist, Gap, San Francisco, CA
4. **Dr. Hao Yuan**, IOE, University of Michigan, 2015 – 2019  
Dissertation: Data Driven Optimization: Theory and Applications in Supply Chain Systems  
Defense Date: March 28, 2019  
First Position: Applied Scientist, Amazon (Alexa), Seattle, WA
5. **Armando Bernal**, IOE, University of Michigan, 2016 –  
Dissertation: TBD  
Defense Date: Winter 2020 (Expected)  
First Position: N/A

## Ph.D. Dissertation Committee

1. **Fatemah Navidi**, IOE, University of Michigan, 2015 –  
Dissertation: Approximation Algorithms in Stochastic Covering and Selection  
Defense Date: Summer 2020 (Expected)  
First Position: N/A
2. **Esmail Keyvanshokoh**, IOE, University of Michigan, 2015 –  
Dissertation: Online Decision Making in Operations Management  
Defense Date: Winter 2020 (Expected)  
First Position: N/A
3. **Elnaz Kabir**, IOE, University of Michigan, 2015 –  
Dissertation: Storm Power Outage Prediction, Repair Crew, and Material Staging via Zero-Inflated, Bayesian Model Averaging, and Stochastic Optimization Models

Defense Date: Summer 2019 (Expected)  
First Position: N/A

4. **Frank Cheng**, EECS, University of Michigan, 2015 –  
Dissertation: The Effects of Strategic Response to Regulatory Policy Change  
Defense Date: Summer 2019 (Expected)  
First Position: N/A
5. **Qi Luo**, IOE, University of Michigan, 2015 –  
Dissertation: Dynamic Pricing, Incentives and Learning in Sharing Mobility: A Continuous Approach  
Defense Date: Fall 2019 (Expected)  
First Position: N/A
6. **Manqi (Maggie) Li**, Technology & Operations, University of Michigan, 2014 – 2019  
Dissertation: TBD  
Defense Date: TBD  
First Position: TBD
7. **Dr. Aravind Govindarajan**, Technology & Operations, University of Michigan, 2014 – 2019  
Dissertation: Essays on Omnichannel and E-commerce Retail Operations  
Defense Date: September 4, 2019  
First Position: Data Scientist, Target, Minneapolis, MN
8. **Dr. Francisco Aldarondo**, IOE, University of Michigan, 2014 – 2019  
Dissertation: Design and Operational Analysis of Automated Guided Vehicle-Based Goods-to-Person Order Picking and Sortation Systems  
Defense Date: August 27, 2019  
First Position: Researcher, Applied Physics Laboratory, Johns Hopkins University
9. **Dr. Yuanyuan Guo**, IOE, University of Michigan, 2014 – 2019  
Dissertation: Data-Driven Distributionally Robust Optimization on Power System Operations  
Defense Date: July 19, 2019  
First Position: Data Scientist, ExxonMobil, Irving, TX
10. **Dr. Qiyun Pan**, IOE, University of Michigan, 2015 – 2019  
Dissertation: Computationally Efficient Methods and Uncertainty Quantification for Extreme Quantile Estimation with Stochastic Simulation Models  
Defense Date: May 2, 2019  
First Position: TBD
11. **Dr. Ece Sancı**, IOE, University of Michigan, 2015 – 2019  
Dissertation: Strategies for Disaster Preparedness and Disruption Risk Mitigation  
Defense Date: April 30, 2019  
First Position: Assistant Professor, School of Management, University of Bath
12. **Dr. Abdullah Alshelahi**, IOE, University of Michigan, 2014 – 2019  
Dissertation: Macroscopic Look at Equity Markets  
Defense Date: February 20, 2019  
First Position: Researcher, General Motors Research & Development, Warren, MI
13. **Dr. Xiang Liu**, IOE, University of Michigan, 2014 – 2018  
Dissertation: Operations Research Models for Reducing Hospital Readmissions  
Defense Date: December 18, 2018  
First Position: Assistant Professor, Department of Industrial Engineering, Tsinghua University
14. **Dr. Nima Salehi Sadghiani**, IOE, University of Michigan, 2014 – 2018  
Dissertation: Models for Flexible Supply Chain Network Design  
Defense Date: April 23, 2018  
First Position: Data Scientist, Gap, San Francisco, CA

15. **Dr. Amirhossein Meisami**, IOE, University of Michigan, 2014 – 2018  
 Dissertation: Integrated Learning and Optimization Frameworks with Applications in Operations Management  
 Defense Date: April 5, 2018  
 First Position: Data Scientist, Adobe Research, San Jose, CA
16. **Dr. Qi (George) Chen**, Technology & Operations, University of Michigan, 2010 – 2017  
 Dissertation: Dynamic Pricing under Operational Frictions  
 Defense Date: April 11, 2017  
 First Position: Assistant Professor, Naveen Jindal School of Management, University of Texas at Dallas
17. **Dr. Elliot Do Yong Lee**, IOE, University of Michigan, 2011 – 2016  
 Dissertation: Management of a Chronically Ill Population: An Operations Approach to Liver Cancer Screening  
 Defense Date: May 4, 2016  
 First Position: Research Analyst, Center for Naval Analyses CNA Corporation
18. **Dr. Zhihao Chen**, IOE, University of Michigan, 2011 – 2016  
 Dissertation: Strategic Network Planning under Uncertainty with Two-Stage Stochastic Integer Programming  
 Defense Date: February 12, 2016  
 First Position: Research Scientist II, Amazon, Seattle, WA
19. **Dr. Boxiao (Beryl) Chen**, IOE, University of Michigan, 2010 – 2016  
 Dissertation: Learning Algorithms for Stochastic Dynamic Inventory Systems  
 Defense Date: March 23, 2016  
 First Position: Assistant Professor, College of Business Administration, University of Illinois at Chicago
20. **Dr. Yao Cui**, Technology & Operations, University of Michigan, 2009 – 2015  
 Dissertation: Strategic Pricing in Service Industries  
 Defense Date: April 9, 2015  
 First Position: Assistant Professor, Johnson Graduate School of Business, Cornell University

## Masters Students Supervised

1. **Jing Yang**, IOE, University of Michigan, 2018 – 2019  
 Project Title: Inventory Routing Problems  
 First Position: Ph.D. Student at School of Industrial Engineering, Purdue University.
2. **Charles Su**, Ross MBA, University of Michigan, 2018 – 2019  
 Project Title: Applying a Facility Location Model to Amazon's US Fulfillment Center Network  
 First Position: Data Scientist, Amazon, Seattle, WA
3. **Baiyang (Sarah) Liu**, IOE, University of Michigan, 2012 – 2013  
 Project Title: Revenue Management of Reusable Resources with Advanced Reservations  
 First Position: Senior Researcher, General Motors Research & Development, Warren, MI
4. **Xing (Shane) Li**, IOE, University of Michigan, 2012 – 2013  
 Project Title: Cyclical Production Scheduling  
 First Position: Senior Operations Research Consultant, Sabre Corporation, Dallas/Fort Worth Area

## Undergraduate Students Supervised

1. **Chao Qin**, IOE, University of Michigan, 2012 – 2015  
 Project Title: A Faster Algorithm for the Resource Allocation Problem with Convex Cost Functions  
 First Position: Ph.D. Student at IEMS, Northwestern University.

Current Position: Ph.D. Student at DRO, Columbia Business School, Columbia University.  
**Joint papers have been Finalists, INFORMS Undergraduate Research Prize, 2014, 2015.**

2. **Cheng Hua**, IOE, University of Michigan, 2012 – 2015  
 Project Title: Stochastic Regret Minimization for Revenue Management Problems with Nonstationary Demands  
 First Position: Ph.D. Student at Yale School of Management, Yale University.  
**Joint paper has been Finalist, INFORMS Undergraduate Research Prize, 2014.**
3. **Yiren Zhou**, IOE, University of Michigan, 2015 – 2017  
 Project Title: Priority Rules for Multi-Task Due-Date Scheduling under Varying Processing Costs  
 First Position: Masters Student at ORIE, Cornell University.  
 Current Position: High Frequency Trading, DRW, Chicago, IL.

## Teaching Activities

### Courses at the University of Michigan – Ann Arbor

1. IOE 265 Probability and Statistics for Engineers (Undergraduate Core Class)
2. IOE 516 Stochastic Processes II (Ph.D. Class)
3. IOE 541 (IOE 591) Optimization Methods in Supply Chain (Ph.D./Masters Class)
4. IOE 490 Undergraduate Directed Study, Research, and Special Problems
5. IOE 590 Masters Directed Study, Research, and Special Problems
6. IOE 899 IOE Seminar Series (Invited 11 External Speakers)

### Teaching Evaluations (based on a 5.0 scale)

**Q1:** Overall, this was an excellent course;

**Q2:** Overall, the instructor was an excellent teacher;

**Q4:** The student had a strong desire to take this course (independent of any instructors).

| <i>Semester</i> | <i>Course</i> | <i>Level</i> | <i>Title</i>       | <i>Enroll/Resp.</i> | <b>Q1</b>   | <b>Q2</b>   | <i>Q4</i>   |
|-----------------|---------------|--------------|--------------------|---------------------|-------------|-------------|-------------|
| Winter 19       | IOE 516       | PHD/G        | Stochastic Proc II | 27/26               | <b>4.90</b> | <b>4.90</b> | <i>4.80</i> |
| Fall 18         | IOE 541       | PHD/G        | Supply Chain Mgt   | 40/38               | <b>4.73</b> | <b>4.79</b> | <i>4.53</i> |
| Fall 18         | IOE 265       | UG           | Prob&Stat Engr     | 131/118             | <b>4.28</b> | <b>4.54</b> | <i>3.70</i> |
| Winter 18       | IOE 516       | PHD/G        | Stochastic Proc II | 23/23               | <b>4.78</b> | <b>4.86</b> | <i>4.68</i> |
| Fall 17         | IOE 591       | PHD/G        | Supply Chain Mgt   | 38/35               | <b>4.85</b> | <b>4.85</b> | <i>4.36</i> |
| Fall 17         | IOE 265       | UG           | Prob&Stat Engr     | 140/121             | <b>4.53</b> | <b>4.67</b> | <i>4.03</i> |
| Winter 17       | IOE 516       | PHD/G        | Stochastic Proc II | 23/21               | <b>4.88</b> | <b>4.92</b> | <i>4.55</i> |
| Fall 16         | IOE 591       | PHD/G        | Supply Chain Mgt   | 31/20               | <b>4.68</b> | <b>4.82</b> | <i>4.85</i> |
| Fall 16         | IOE 265       | UG           | Prob&Stat Engr     | 108/93              | <b>4.69</b> | <b>4.69</b> | <i>3.96</i> |
| Winter 16       | IOE 516       | PHD/G        | Stochastic Proc II | 21/19               | <b>4.77</b> | <b>4.82</b> | <i>4.77</i> |
| Fall 15         | IOE 265       | UG           | Prob&Stat Engr     | 141/114             | <b>4.15</b> | <b>4.34</b> | <i>3.87</i> |
| Winter 15       | IOE 516       | PHD/G        | Stochastic Proc II | 18/17               | <b>4.85</b> | <b>4.89</b> | <i>4.25</i> |
| Fall 14         | IOE 265       | UG           | Prob&Stat Engr     | 121/89              | <b>4.03</b> | <b>4.28</b> | <i>3.81</i> |
| Winter 14       | IOE 516       | PHD/G        | Stochastic Proc II | 17/16               | <b>4.70</b> | <b>4.77</b> | <i>4.25</i> |
| Fall 13         | IOE 265       | UG           | Prob&Stat Engr     | 133/69              | <b>4.12</b> | <b>4.31</b> | <i>3.62</i> |
| Winter 13       | IOE 516       | PHD/G        | Stochastic Proc II | 17/14               | <b>4.86</b> | <b>4.96</b> | <i>4.63</i> |