

## Jie Ning

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CONTACT INFORMATION	Department of Operations, Weatherhead School of Management Case Western Reserve University 11119 Bellflower Road, Cleveland, OH 44106-7235 <i>Phone:</i> (216)-368-3841 <i>E-mail:</i> jie.ning@case.edu
EMPLOYMENT	Assistant Professor (2013 – ) Department of Operations, Weatherhead School of Management Case Western Reserve University
EDUCATION	Ph.D. in Industrial & Operations Engineering, 2013 University of Michigan, Ann Arbor  M.S. in Physics, 2008 University of Michigan, Ann Arbor  B.S. in Physics, 2006 University of Science and Technology of China
RESEARCH INTERESTS	Interfaces of operations with finance and economics; Markov decision processes and applications; business analytics (combination of analytical and empirical research); supply chain management.
PUBLICATIONS	<b>Papers in Academic Journals</b> <ul style="list-style-type: none"><li>• <b>J. Ning</b>, M. J. Sobel, “Easy affine Markov decision processes.” Forthcoming in <i>Operations Research</i>.</li><li>• <b>J. Ning</b>, V. Babich, J. Handley, J. Keppo (2018), “Risk-aversion and B2B contracting under asymmetric information: evidence from managed print services”. <i>Operations Research</i>, 66(2), 392–408.</li><li>• <b>J. Ning</b>, V. Babich (2018), “R&amp;D investments in the presence of knowledge spillover and debt financing: can risk-shifting cure free-riding?”. <i>Manufacturing &amp; Service Operations Management</i>, 20(1), 97–112.</li><li>• <b>J. Ning</b>, M. J. Sobel (2018), “Production and Capacity Management with Internal Financing”. <i>Manufacturing &amp; Service Operations Management</i>, 20(1), 147–160.</li></ul> <b>Refereed Book Chapters</b> <ul style="list-style-type: none"><li>• <b>J. Ning</b> (2017), “Easy Affine Markov Decision Processes: Properties and Applications”. <i>Tutorials in Operations Research</i>.</li><li>• <b>J. Ning</b> (2017), “Production, Capacity, and Liquidity of a Self-Financed Firm”. <i>Supply Chain Finance: Recent Research &amp; Advances in Practice</i>, editors: P. Kouvelis, L. Dong, D. Turcic.</li></ul>
WORK IN PROGRESS	<b>Manuscripts under Review/Revision</b> <ul style="list-style-type: none"><li>• <b>J. Ning</b>, “Reducible Markov decision processes and stochastic games with exact projection.” Under 2nd-round review at <i>Management Science</i>.</li></ul>

- D. Solow, **J. Ning**, J. Zhu, “Effective heuristics for finding balanced teams”. Under revision for resubmission to *IIE Transactions*.

PATENT

J. Handley, **J. Ning**, J. Reitz, “System and Method to Detect Printing Devices with High Incident Rates”, 2011, US 20120209565.

HONORS AND AWARDS

**Case Western Reserve University.**

- Research grant awarded by Center for Financial Markets and Policy, McDonough School of Business, Georgetown University (received with co-author Volodymyr Babich), 2016.

**University of Michigan, Ann Arbor.**

- Nominated for the Future Academician Colloquium, 2012.
- Katta Murty Prize for the Best Research Paper on Optimization, 2012.
- Wilson Prize for the Best Research Paper in Manufacturing, 2012.
- IOE Departmental Fellowship, 2008–2009.
- Rackham Conference Travel Grant Award, 2008 – 2012.
- Physics Departmental Fellowship, 2006–2007.

**University of Science and Technology of China.**

- Outstanding Student Scholarship, 2003 – 2006.

SEMINARS AND PRESENTATIONS

**Research Seminars**

- “Easy Affine Markov Decision Processes”, Weatherhead School of Management, Case Western Reserve University, Sept. 2017.
- “Production, Capacity, and Liquidity of a Self-Financed Firm”, Weatherhead School of Management, Case Western Reserve University, April 2015.

**Conference Presentations**

- “Production and capacity management with internal financing”, Supply Chain Finance & Risk Management Workshop, St. Louis, MO, 2017 (Attendance by invitation only)
- “R&D investments in the presence of knowledge spillover and debt financing: can risk-shifting be a cure for free-riding in equilibrium?”, INFORMS (Institute for Operations Research and Management Sciences) 2016 Annual Conference, Nashville, TN, 2016 (Invited talk).
- “Easy affine Markov decision processes: algorithms and applications”, INFORMS (Institute for Operations Research and Management Sciences) 2016 Annual Conference, Nashville, TN, 2016 (Invited talk)
- “Production, Capacity, and Liquidity of a Financially Constrained Firm”, Supply Chain Finance & Risk Management Workshop, St. Louis, MO, 2016 (Attendance by invitation only)
- “How Do Information Spillover and Debt Financing Affect Companies’ Innovation Decisions?”, INFORMS (Institute for Operations Research and Management Sciences) 2015 Annual Conference, Philadelphia, PA, 2015 (Invited talk).
- “Production, Capacity, and Liquidity of a Self-Financed Firm”, iFORM (interface of Finance, Operations and Risk Management) SIG (Special Interest Group) MSOM

(Manufacturing & Service Operations Management society) 2015 Annual Conference, Toronto, Canada, 2015 (Competitive selection).

- “Production, Capacity, and Liquidity of a Self-Financed Firm”, POMS (Production & Operations Management society) 2015 Annual Conference, Washington DC, 2015 (Invited talk).
- “Risk-aversion and Contracting in Managed Print Services”, INFORMS (Institute for Operations Research and Management Sciences) 2014 Annual Conference, San Francisco, CA, 2014 (Invited talk).
- “Testing the Risk-Aversion Assumption of the Service Provider: An Empirical Study of Contracting in Managed Print Services under Asymmetric Information”, MSOM 2014 Annual Conference, Seattle, WA, 2014.
- “One Price, Different Profits: An Empirical Study on the Cost of Demand Risk Under Risk Pooling”, POMS 2014 Annual Conference, Atlanta, GA, 2014 (Invited talk).
- “Managed Print Service Pricing using a Linear Model for Customer Service Valuation”, INFORMS 2012 Annual Conference, Phoenix, AZ, 2012 (Invited talk).
- “Price Print Services Based on Customer’s Perceived Value: An Empirical Study”, MSOM 2012 Annual Conference, New York, NY, 2012.
- “Industrial Service Pricing Based on Customer Perceived Value: an Empirical Study”, INFORMS 2011 Annual Conference, Charlotte, NC, 2011.
- “Demand Risk Diversification in Outsourcing”, INFORMS 2010 Annual Conference, Austin, TX, 2010.
- “Pricing and managing risks in supply chain using marginal indifference pricing”, INFORMS 2009 Annual Conference, San Diego, CA, 2009.
- “Pricing and managing risks in global manufacturing enterprise”, NSF Engineering Research and Innovation Conference, Honolulu, HI, 2009.

#### TEACHING

Operations Research and Supply Chain Management: 2013–2016 (Undergraduate core)  
Operations Management, fall 2016–2017 (Core course in MSM-Supply Chain Program)

#### SERVICE

##### **Professional**

- Session chair/co-chair:
  - “Markov Decision Processes: Applications”, INFORMS 2016 Annual Conference, Nashville, TN, 2016.
  - “Markov Decision Processes: Theory”, INFORMS 2016 Annual Conference, Nashville, TN, 2016.
  - “Operations/Corporate Finance Interface”, INFORMS 2016 Annual Conference, Nashville, TN, 2016.
  - “Risk Management and Pricing in Operations”, INFORMS 2012 Annual Conference, Phoenix, AZ, 2012.
  - “Operational Flexibility and Supply Chain Network”, INFORMS 2010 Annual Conference, Austin, TX, 2010.

- Journal referee  
*Management Science*  
*Manufacturing & Service Operations Management*  
*Production & Operations Management*  
*Mathematics of Operations Research*  
*Naval Research Logistics*  
*Journal of Industrial and Management Optimization*  
*Omega, The International Journal of Management Science*

**Department**

- Weatherhead UGIS committee, 2016 –
- Departmental search committee, 2014 –
- Departmental seminar committee, 2015 –
- Interdepartmental seminar organizer, 2015.

PROFESSIONAL  
DEVELOPMENT  
ACTIVITIES

**Teaching**

- One-day workshop with teaching coach, Department of Operations, CWRU, 2015.
- Teaching workshops, CWRU, 2015

**Research**

- To Tenure & Beyond Workshops, CWRU, 2014–2015.
- Departmental seminars, Weatherhead School of Management, 2013–.
- Presentation and attendance at professional conferences, 2013–.

PROFESSIONAL  
MEMBERSHIPS

Institute for Operations Research and Management Sciences (INFORMS)  
 Manufacturing and Service Operations Management Society (MSOM)  
 Decision Analysis Society (DA)