# **CURRICULUM VITAE**

# Mohammad E. Nikoofal

Associate Professor of Operations and Supply Chain Management

Global Management Studies Department

Ted Rogers School of Management, Toronto Metropolitan University

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#### RESEARCH INTERESTS

Context: Supply chain contracting/risk management, Operations/Marketing interface, Policy Design, Public-

Private Partnership, Homeland Security

Methodology: Optimization, Game Theory, Mechanism Design, Theory of Incentives

# ACADEMIC/PROFESSIONAL EXPERIENCE

Ted Rogers School of Management

Assistant Professor, Global Management Studies, July 2016 – Present

Católica Lisbon School of Business & Economics

Assistant Professor, Supply Chain & Operations Management, September 2014 – July 2016

# EDUCATIONAL BACKGROUND

• McGill University, Montreal, QC

Ph.D., Operations Management (minor in economics), February 2015.

Thesis: Risk management under information asymmetry: applications in homeland security and supply disruption

Supervisor: Professor Mehmet Gumus

• Amirkabir University of Technology (Teheran Polytechnic), Tehran, Iran

M.Sc., Industrial Engineering, August 2006.

Thesis: An inventory model with dependent returns and disposal cost

Supervisor: Professor Seyed Mohammad Moattar Husseini

• Isfahan University of Technology, Isfahan, Iran B.S., Industrial Engineering, February 2004.

# REFEREED JOURNAL PAPERS

[J1] Gao Long, **Mohammad E. Nikoofal**, Wei Zhang, (2022). The Strategic Role of Supplier Learning. *Manufacturing & Service Operations Management*, forthcoming.

[J2] Ertekin, Necati, Mehmet Gümüş, and Mohammad E. Nikoofal (2022). "Online-exclusive or hybrid? Channel merchandising strategies for ship-to-store implementation." *Management Science* 68.8: 5828-5846.

[J3] **Nikoofal, M. E.**, and Mehmet Gümüş, (2020) Value of Audit for Supply Chains with Hidden Action and Information. *European Journal of Operational Research*, 285(3): 902-915.

[J4] **Nikoofal**, **M. E.**, and Mehmet Gümüş, (2019) Supply Diagnostic Incentives under Endogenous Information Asymmetry. *Production and Operations Management* 28.3: 588-609.

[J5] **Nikoofal, M. E.**, and Mehmet Gümüş, (2018) Quality at the source or at the end? Managing supplier quality under information asymmetry. *Manufacturing & Service Operations Management*, 20.3: 498-516.

[J6] Nikoofal, M. E. and Zhuang, J., (2015) On the Value of Secrecy and Exposure of Defense System: First-

- Mover Advantage vs. Robustness, 246 (1), 320 330, European Journal of Operational Research.
- Finalist at INFORMS Decision Analysis Society (DAS) 2013, Best Student Paper Award (among 6 finalists out of 34)
- [J7] **Nikoofal, M. E.** and M. Gumus, (2015) On the Value of Terrorist's Private Information in Government's Defensive Resource Allocation Problem, 47, 1-23, *IIE Transactions*.
  - Winner of GERAD (Group for Research in Decision Analysis) Doctoral Student Award
  - Featured Article in IE (Industrial Engineer) Magazine, May 2015, Volume 47, Number 5
  - Finalist in Canadian Operational Research Society (CORS) 2012, Best Student Paper Award (Among 4 papers accepted)
- [J8] **Nikoofal, M. E.** and Zhuang, J. (2012), Robust Allocation of a Defensive Budget Considering an Attacker's Private Information, 32 (5): 930 943, *Risk Analysis*.
- [J9] **Nikoofal, M. E.** and Sadjadi, S. J. (2010), A robust optimization model for p-median problem with uncertain edge lengths. *The International Journal of Advanced Manufacturing Technology*, 50 (1-4), 391 397.
- [J10] **Nikoofal, M. E.** and Moattar Husseini, S. M. (2010), An inventory model with dependent returns and disposal cost, *International Journal of Industrial Engineering Computations*, 1 (1), 45 54.

#### PAPERS IN REVIEW/UNDER REVISION

- [J11] **Mohammad E. Nikoofal**, Morteza Pourakbar, Mehmet Gumus, Public-Private Partnership to Secure Containerized Supply Chains: Examining Operational and Security Incentives, status: under review at *Production & Operations Management*.
- [J12] **Mohammad E. Nikoofal**, Manaf Zargoush, Mehmet Gumus. Public Incentives for Private Sector Investment in Cybersecurity, status: under revision to resubmit at *Production & Operations Management*.
- [J13] Morteza Pourakbar, Paolo Letizia, **Mohammad E. Nikoofal**. Combatting Remanufactured Counterfeit Products. Status: under revision to resubmit at *Production & Operations Management*.
- [J14] Jafar Heydari, Alireza Bakhshi, **Mohammad E. Nikoofal**, Coping with an unreliable supplier: An option contract with a backup supplier. Under review at *International Transactions in Operational Research*.

#### WORKING PAPERS

- [J15] **Mohammad E. Nikoofal**, Long Gao, Mahsa Madani Hosseini, Wei Zhang, "Retail Contracting under Endogenous Network Externality".
- [J16] Wei Qi, **Mohammad E. Nikoofal**, and Mehmet Gumus. Incentive Mechanisms for Social Cost Minimization of Parking Problem: Theoretical and Empirical Analyses, status: Model formulation, analysis and initial draft are done.

#### CONFERENCE PROCEEDINGS

- [J17] Nikoofal, M. E. and Mehmet Gumus. How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit. M&SOM 2012, Conference Proceedings, Columbia University, New York, 2012.
- [J18] Nikoofal, M. E. and M. Gumus, Supply Diagnostic Incentives in New Product Development, M&SOM 2013, Conference Proceedings, INSEAD, Paris, 2013.

#### MEDIA COVERAGE

[M1] Based on publication [J2], How to Keep Suppliers Honest—Instead of Allowing Them Every Opportunity not to Be, September 2019, by McGill—delve.

[*M2*] Based on publication [J4], Spending defence budgets the wrong way risks major damage from terrorist attacks, January 2015, by Ty Burke Jacob Myrick ResponseSource.

#### TEACHING EXPERIENCE

Ted Rogers School of Management, Ryerson University

- Operations Management (GMS 401)
- Project Management (GMS 450)
- Manufacturing Management (GMS 805)

#### Católica Lisbon School of Business & Economics

Operations Management, February 2015

Required course for M.Sc. program

Supply Chain Management, April 2015, November 2015
 Elective course for M.Sc. program

Operations Management, February 2016
 Required course for undergraduate program

#### Desautels Faculty of Management, McGill University

Instructor [with Full Course Responsibility], Operations Management, Summer 2012 Required course for Bachelor of Commerce Program, Evaluation (4/5) Teaching Assistant, Operations Management, Winter and Fall 2010, Winter 2011, 2012 Teaching Assistant, Quantitative Spreadsheet Modeling, Fall 2012

#### Iran Industrial Management Organization

Instructor [with Full Course Responsibility], Introduction to Operations Research and Mathematical Modeling, Fall and Winter 2007 and 2008 (4 semesters)

Iran Industrial Management Organization, MBA program

 Instructor [with Full Course Responsibility], Production planning and Inventory Management, Fall and Winter 2008 (2 semesters)

Iran Industrial Management Organization, MBA program

# HONORS AND AWARDS

- McMaster University's COVID-19 grant, 2020 2021, \$74,000. Role: Co-PI.
- NSERC Discovery Grant, 2019 2024, \$130,000. Role: Principal Investigator.
- NSERC Discovery Launch Supplement Award, 2019 2020, \$12,500 Role: Principal Investigator.
- SSHRC Insight Development Grant 2018, Project: Collaborative Transportation Management under Information Asymmetry, \$72,000. Role: Co-PI.
- TRSM 2019 Outstanding Dean's Office Outstanding Research Recognition Fund, \$4,000.
- Public Safety Canada, Policy Development Contribution Program 2017 2019, Project: Designing Public Incentives for Private Partnership in Homeland Security, \$27,640. Role: Principal Investigator.
- Ryerson Social Sciences and Humanities Research Council Canada Institutional Grant 2017 2018, \$9,230.
  Role: Principal Investigator.
- SSHRC Insight Development Grant 2016, Project: Public-Private Partnership to Enhance Homeland Security, \$60,000\$. Role: Co-PI.

- Finalist of the INFORMS Decision Analysis Society (DAS) Student Paper Award, 2013
- Finalist of the CORS (Canadian Operational Research Society) Student Paper Award, 2012
- GERAD (Group for Research in Decision Analysis), 6,500\$, 2011 Doctoral Student Financial Award
- Rathlyn Foundation PhD Fellowship, 6,500\$, 2013
- National Bank Financial Group Fellowship, 5,000\$, 2012
- McGill University PhD Fellowship, 2009

#### **INVITED SEMINAR PRESENTATIONS**

- [S1] Securing Containerized Supply Chain through Public and Private Partnership, Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University, November 2022.
- [S2] Supply Diagnostic Incentives under Endogenous Information Asymmetry, Ted Rogers School of Management, Ryerson University, Toronto, Ontario, April 2016.
- [S3] Supply Diagnostic Incentives under Endogenous Information Asymmetry, Rotterdam School of Management, Erasmus University, Rotterdam, Netherland, September 2015.
- [S4] Value of Information in Contract Manufacturing, IESE Business School, Department of Managerial Decision Sciences, Barcelona, Spain, February 2014.
- [S5] Value of Information in Contract Manufacturing, Católica Lisbon School of Business and Economics, Lisbon, Portugal, December 2013.
- [S6] On the Value of Terrorist's Private Information in Government's Defensive Resource Allocation Problem CIPSS 2012 (Center for International Peace and Security Studies conference, University de Montreal, Canada, March 2012.
- [S7] How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, Group for Research in Decision Analysis (GERAD), Montreal, Canada, May 2012.

# CONFERENCE PRESENTATIONS<sup>1</sup>

- [C1] Mohammad Nikoofal, Morteza Pourakbar, and Mehmet Gumus. Public-Private Partnership to Secure Containerized Supply Chains, Annual CORS Conference, June 2022, Vancouver, Canada.
- [C2] <u>Mohammad Nikoofal</u>, Morteza Pourakbar, and Mehmet Gumus. Public-Private Partnership to Secure Containerized Supply Chains, Annual CORS Conference, June 2021, Online.
- [C3] Ertekin, N, Mehmet Gumus, and Mohammad Nikoofal. Ship-to-Store with or without Inventory Information: Theoretical and Empirical Analyses of Its Impact and Implementation. Annual INFORMS Conference, Oct 2019, Seattle, Washington.
- [C4] <u>Ertekin, N</u>, Mehmet Gumus, and Mohammad Nikoofal. The Rise of Ship-to-Store: Theoretical and Empirical Analyses of Its Impact on Online Sales. Annual INFORMS Conference, Nov 2018, Phoenix, Arizona.
- [C5] Quality at the source or at the end? Managing supplier quality under information asymmetry. 4<sup>th</sup> International Conference on Industrial and Systems Engineering (ICISE), Keynote Speaker, 12 13 September 2018, Ferdowsi University of Mashhad, Iran.
- [C6] Mohammad Nikoofal and Mehmet Gumus. Supply Diagnostic Incentives in New Product Launch, 22<sup>nd</sup> EurOMA Conference, July 2015, Neuchatel, Switzerland.
- [C7] Mohammad Nikoofal and Mehmet Gumus. The Value of Diagnostic Test in Contract Manufacturing

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<sup>&</sup>lt;sup>1</sup> Presenter is underlined.

- under Supply Risk, Annual POMS Conference, May 2015, Washington, DC.
- [C8] Morteza Pourakbar, Mohammad Nikoofal, Saied Samiedaluie, and Mehmet Gumus. Does Punishment Work? On the Value of Buyer's Commitment in Supplier's Dynamic Improvement, Annual INFORMS Conference, Nov 2014, San Francisco, CA.
- [C9] Mohammad Nikoofal and Mehmet Gumus. Supply Diagnostic Incentives in New Product Launch, Annual INFORMS Conference, Nov 2014, San Francisco, CA.
- [C10] Mohammad Nikoofal and Mehmet Gumus. The Value of Audit in Managing Supplier's Process Improvement, Annual INFORMS Conference, Nov 2014, San Francisco, CA.
- [C11] Mohammad Nikoofal and Mehmet Gumus. The Value of Diagnostic Test in Contract Manufacturing under Supply Risk, Annual CORS Conference, May 2014, Ottawa, ON.
- [C12] Mohammad Nikoofal and Mehmet Gumus. The Value of Diagnostic Test in Contract Manufacturing under Supply Risk, Annual POMS Conference, May 2014, Atlanta, GA.
- [C13] <u>Mohammad Nikoofal</u> and Mehmet Gumus. Supply Diagnostic Incentives in New Product Launch, Annual INFORMS Conference, MSOM 2013 Conference, July 2013, INSEAD, Paris, France.
- [C14] <u>Mohammad Nikoofal</u> and Mehmet Gumus. On the Value of Terrorist's Private Information in Government's Defensive Resource Allocation, Annual POMS Conference, May 2013, Denver, CO.
- [C15] Mohammad Nikoofal and Mehmet Gumus. Supply Diagnostic Incentives in New Product Launch, Annual POMS Conference, May 2013, Denver, CO.
- [C16] <u>Mohammad Nikoofal</u> and Mehmet Gumus. The Value of Audit in Managing Supplier's Process Improvement, Annual INFORMS Conference, Oct 2013, Minneapolis, MN.
- [C17] <u>Mohammad Nikoofal</u> and Mehmet Gumus. Supply Diagnostic Incentives in New Product Development, Annual INFORMS Conference, Oct 2013, Minneapolis, MN.
- [C18] Mohammad Nikoofal and Mehmet Gumus. How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, Annual INFORMS Conference, Oct 2012, Phoenix, AZ.
- [C19] Mohammad Nikoofal and Mehmet Gumus, What would you know about the next terrorist attack? Target Information vs. Rationality of the Attacker, 2012 CORS/MOPGP International Joint Conference, June 2012, Niagara Falls, ON.
- [C20] Mohammad Nikoofal and Mehmet Gumus, How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, 2012 CORS/MOPGP International Joint Conference, June 2012, Niagara Falls, ON.
- [C21] Mohammad Nikoofal and Mehmet Gumus, How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit. MSOM 2012 Conference, June 2012, Columbia University, New York City, NY.
- [C22] Mohammad Nikoofal and Mehmet Gumus, How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, Annual POMS Conference, April 2012, Chicago, IL.
- [C23] Mohammad Nikoofal and Mehmet Gumus. What would you know about the next terrorist attack? Target Information vs. Rationality of the Attacker, Annual INFORMS Conference, Nov 2011, Charlotte, NC.
- [C24] <u>Mohammad Nikoofal</u> and Mehmet Gumus. How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, Annual INFORMS Conference, Nov 2011, Charlotte, NC.
- [C25] <u>Mohammad Nikoofal</u> and Mehmet Gumus. How To (and How Not To) Manage Supplier's Process Improvement: Delegation, Incentives, or Audit, The 7<sup>th</sup> INTRIM Conference, August 2011, Montreal.
- [C26] <u>Mohammad Nikoofal</u> and Jun Zhuang. On the Robustness of Secrecy and Exposure of Defense System in Defender-Attacker Games, Annual INFORMS Conference, Oct 2012, Phoenix, AZ.