

Curriculum Vita

Misuk Lee

Albers School of Business and Economics, Seattle University
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Education

Georgia Institute of Technology, Atlanta, GA (2004 - 2009)

- Ph.D in Industrial Engineering, Aug. 2009
- Dissertation Title: Airline Passengers' Online Search and Purchase Behaviors
- Concentration: Statistics/Stochastic Systems Minor: Economics

Seoul National University, Seoul, Korea (1996-2002)

- M.S. in Industrial Engineering, Feb. 2002 - B.S. in Industrial Engineering, Feb. 2000

Professional Experience

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| 2016 - Present | Seattle University, Seattle, WA |
| | - Assistant Professor (The Albers School of Business and Economics) |
| 2014-2016 | Salisbury University, Salisbury, MD |
| | - Assistant Professor (The Franklin Perdue School of Business) |
| 2013-2014 | Korea Aerospace University, Korea |
| | - Assistant Professor (College of Air Transport and Business) |
| 2010-2013 | Intercontinental Hotels Group, Atlanta, GA |
| | - Operations Research Consultant (Revenue Management) |
| 2009-2010 | Georgia Institute of Technology, Atlanta, GA |
| | - Post-Doc Fellow/Lecturer |
| 2002-2004 | IBM Business Consulting Services, Korea |
| | - Consultant |

Research Interests

Forecasting, Machine Learning, Revenue Management, Consumer Behavior, and Applied Statistics.

Teaching Experience

Seattle University, Seattle, WA

BUAN 5510	Capstone Project in Business Analytics (Fall 2017, Fall 2018, Fall 2019, Fall 2020)
IS 5310	Data Mining for Business Intelligence (Spring 2017)
BUAN 5310	Statistical Learning (Spring 2019, Winter 2020)
IS 5201	Programming for Business Analytics (Winter 2017, Winter 2018, Fall 2018, Fall 2019, Fall 2020)
IS 3150	Introduction to Information Systems (Fall 2016, Winter 2017, Spring 2017, Spring 2018, Winter 2019, Spring 2019)

Salisbury University, Salisbury, MD

INFO 281	Intermediate Business Statistics (Fall 2014, Spring 2015, Spring 2016)
INFO 338	Business Analytics (Spring 2015)
INFO 311	Business Systems Analysis (Spring 2016)

Korea Aerospace University, Korea

Demand and Revenue Management (Spring 2014, Spring 2013)
OR Application (Spring 2014)
Stochastic Manufacturing and Service Systems (Fall 2013)
Financial Accounting and ERP Systems (Fall 2013)
Global Supply Chain Management (Fall 2013)
Production and Service Operations Management (Spring 2013)

Georgia Institute of Technology, Atlanta, GA

CEE 3770	Statistics and Applications (Summer 2009)
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Refereed Journal Papers

- Misuk Lee (2020), "Will this search end up with booking? Modeling airline booking conversion of anonymous visitors," *Journal of Tourism Analysis*, forthcoming.
- Misuk Lee, Xinpan Mu, and Yiqiao Zhang (2020), "A Machine Learning Approach To Improving Forecasting Accuracy of Hotel Demand: A Comparative Analysis of Neural Networks and Traditional Models," *Issues in Information Systems*, Vol 21, Issue 1, 12-21.
- James J. Lee and Misuk Lee (2020), "Artificial Social Intelligence: Hotel Rate Prediction," *Advances in Intelligent Systems and Computing*, Vol 1130, 78-82.
- Misuk Lee (2018), "Modeling and Forecasting Hotel Demand Based On Advance Booking Information," *Tourism Management*, Vol 66, 62-71.

- Misuk Lee and Byungjong Kim (2013), "How can growth in air travel demand influence airline productivity and profitability?" *Korean Journal of Transport Research*, Vol 20, Num 3.
- Misuk Lee, Alexandre Khelifa, Laurie Garrow, Michel Bierlaire, and David Post (2012), "An analysis of destination choice for opaque airline products using multidimensional binary logit models," *Transportation Research Part A: Policy and Practice*, Vol 46, Num 10, 1641-1653.
- Laurie Garrow, Tudor D. Bodea, and Misuk Lee (2010), "Generation of Synthetic Datasets for Discrete Choice Analysis," *Transportation*, Vol 37, Num 2, 183-202.

Refereed Conference Proceedings

- Misuk Lee (2018), "Investigating the Impact of Online Browsing Dynamics on Promotion Effectiveness," *Proceedings of 2018 4th International Conference on Information Management (ICIM)*, 155-159

Book Chapter

- Laurie A. Garrow, Frank S. Koppelman, and Misuk Lee (2010), "Structured Extensions of MNL and NL Discrete Choice Models," *Discrete Choice Modelling and Air Travel Demand: Theory and Applications*. Ashgate Publishing: Aldershot, United Kingdom.

Work in Progress

- James Lee and Misuk Lee, "Neural Network Blended Forecasting Method," Target Journal: *Communications of ACM*.
- Misuk Lee, "A New Statistical Approach to Inventory Allocation in a Multi-channel Distribution System," Target Journal: *Decision Sciences*.

Research Presentations

- May 2020 "A Machine Learning Approach to Improving Forecasting Accuracy of Hotel Demand: A Comparative Analysis of Neural Networks and Traditional Models," IACIS Europe
- Nov. 2019 "Machine learning blending approach to improving forecasting accuracy," IN-FORMS Annual Meeting, Seattle, WA
- Apr. 2019 "Artificial Social Intelligence," 2018-19 Albers Scholarship Seminar Series, Seattle University, Seattle, WA
- Nov. 2018 "Modeling Passengers' Airport Choice in a Multi-Airport Region," DSI Annual Meeting, Chicago, IL

- May 2018 "Investigating the Impact of Online Browsing Dynamics on Promotion Effectiveness," 2018 4th International Conference on Information Management, Oxford, UK
- Jan. 2018 "Modeling Passengers' Airport Choice in a Multi-Airport Region" 2017-18 Albers Scholarship Seminar Series, Seattle University, Seattle, WA.
- Nov. 2016 "Modeling and Forecasting Hotel Room Demand Based on Early Booking Information," 2016-17 Albers Scholarship Seminar Series, Seattle University, Seattle, WA.
- Nov. 2015 "A New Statistical Approach to Inventory Allocation in a Multi-channel Distribution System," INFORMS Annual Meeting, Philadelphia, PA
- Aug. 2013 "A New Statistical Method for Demand Forecasting," NIMS Hot Topics Workshop: Prediction using Fuzzy Theory, Daejeon, Seoul, Korea
- Nov. 2012 "Improving the Forecasting Accuracy of Hotel Arrivals: A New Non-homogeneous Poisson Approach," DSI Annual Meeting, San Francisco, CA
- Oct. 2012 "Improving the Forecasting Accuracy of Hotel Arrivals: A New Non-homogeneous Poisson Approach," INFORMS Annual Meeting, Phoenix, AZ
- Oct. 2009 "Airline Passengers' Online Search and Purchase Behaviors," INFORMS Annual Meeting, San Diego, CA
- Oct. 2009 "Airline Passengers' Online Search and Purchase Behaviors," AGIFORS Annual Symposium, Atlanta, GA
- Oct. 2008 "Optimal Search Behavior of Strategic Customers under Deadlines," INFORMS Annual Meeting, Washington D.C.
- Oct. 2008 "Airline Customers' Searching and Purchasing Behavior," INFORMS Annual Meeting, Washington D.C.
- June 2008 "When to Buy a Ticket?," 8th Conference of INFORMS Revenue Management and Pricing Section, Montreal, Canada
- June 2008 "Markov-based Models of Airline Passengers' Searching and Purchasing Behavior," 8th Conference of INFORMS Revenue Management and Pricing Section, Montreal, Canada
- Oct. 2007 "Dynamic Pricing and Buyer Learning of Product Availability," INFORMS Annual Meeting, Seattle, WA

Patent

System and Method of Executing and Controlling Workflow Processes; patented (USA)
 System and Method for Creating Personalized Template for Monitoring Workflow; patented (Korea)

Honors and Awards

- May 2018 Best presentation award, 2018 4th International Conference on Information Management, Oxford, UK
Misuk Lee, "Investigating the Impact of Online Browsing Dynamics on Promotion Effectiveness."
- April 2009 Best presentation award, Airline Group of the International Federation of Operational Research Societies, Athens, Greece.
Laurie Garrow and Misuk Lee, "Airline customers' online search and purchase behavior for discount fare products."
- Oct. 2008 Invited to Future Academician Colloquium, INFORMS Annual Meeting, Washington D.C.
- 2004-2009 Graduate Research Assistantship, Georgia Institute of Technology
- 2004-2005 National Scholarship for Graduate Studies Abroad (\$60,000), Ministry of Information and Communication, Korea
- 2000-2001 Brain Korea 21 Fellowship, Seoul National University, Korea

Service

- Professional Editorial Board, Cornell Hospitality Quarterly, 2020-Present
Technical Committee, International Conference on Information Management, 2018-Present
Ad-hoc Reviewer, International Journal of Hospitality Management, 2018-2020
Ad-hoc Reviewer, Computers in Industry, 2018
Ad-hoc Reviewer, Transportation Letters, 2017
Ad-hoc Reviewer, International Conference on Information Systems, 2017
Ad-hoc Reviewer, Transportation Letters, 2017
Session Chair, INFORMS Annual Meeting, 2015
Ad-hoc Reviewer, International Journal of Advanced Logistics, 2013
Ad-hoc Reviewer, Eastern Asia Society for Transportation Studies, 2013
- University Academic Honesty Committee, 2020-2021
Faculty Representative, Student Development Committee, 2019-2020
Department Representative: Business & Engineering Career Fair, 2018
Scholarship Review Committee, 2019-2021
MSBA Admissions Committee, 2018-2019
IS Faculty Search Committee, 2018
- School Marketing Faculty Search Committee, 2018