

Dr. Kemal Gürsoy

CONTACT INFORMATION	Rutgers Business School Newark & New Brunswick Rutgers University 100 Rockafeller Road, Room 5146 Piscataway, NJ 08854 USA	Tel: +1-848-445-9242 Fax: +1-732-445-1133 kgursoy@business.rutgers.edu www.rci.rutgers.edu/~kgursoy
TEACHING INTERESTS	<ul style="list-style-type: none">• Statistics and Probability• Operations Management	
RESEARCH INTERESTS	<ul style="list-style-type: none">• Reliability• Sustainability• Random Geometry	
CITIZENSHIP	US Citizen.	
EDUCATION	Ph.D., 1997, Rutgers University , Newark, NJ, USA. <ul style="list-style-type: none">• Dissertation: <i>Branch and bound methods for sequentially choosing among competing projects</i>• Dissertation Adviser: Professor Michael N. Katehakis• Area of Study: Management Science and Information Systems & Statistics M.S., 1987 University of Pennsylvania , Philadelphia, PA, USA <ul style="list-style-type: none">• Area of Study: Systems Engineering• Specialization: Artificial Intelligence & Robotics, Decision Sciences & Information Systems B.S., 1980, M.S., 1981, Middle East Technical University , Ankara, Turkey <ul style="list-style-type: none">• Master's Thesis: <i>Time-varying parameter estimation with extended Kalman filters for adaptive control applications</i>• Thesis Adviser: Halil Ö. Gülcür• Area of Study: Electrical Engineering• Specialization: Adaptive Systems & Stochastic Control Theory	
TEACHING EXPERIENCE	Assistant Professor of Professional Practice Instructor Rutgers University, Department of Management Science and Information Systems, Newark and New Brunswick campuses, New Jersey <ul style="list-style-type: none">• Lectured Statistical Methods In Business• Authored many pages of course material archived at http://www.rci.rutgers.edu/~kgursoy• Attended DIMACS Seminar• Attended MSIS Department Seminar• Attended Applied Probability Seminar Visiting Professor Bogazici University, Department of Mathematics, Istanbul, Turkey <ul style="list-style-type: none">• Lectured Probability Theory, Mathematical Statistics, Multivariate Statistical Analysis	September 2014 - present September 2013 - July 2014 Summer terms, 2000-present

- Part Time Lecturer** 1/2010-12/2012
Rutgers University, Department of Statistics, Piscataway, NJ
- Lectured Theory of Probability, Theory of Statistics, Statistics for Research, Multivariate Statistical Analysis, Statistical Quality Control
 - Authored many pages of course material archived at <http://stat.rutgers.edu/~kgursoy>.
- Associate Professor** 9/2005-8/2008
Kean University, Department of Management Science, Union, NJ
- Lectured Statistical Methods In Business, Operations Management
 - Authored many pages of course material archived at <http://kean.edu/~kgursoy>.
- Assistant Professor** 9/1996-8/2005
Long Island University, Department of Managerial Sciences, Brooklyn, NY
- Lectured Statistical Methods In Business, Operations Management, Information Systems, Business Economics, Time-Series Analysis, Corporate Finance, Mathematical Models for Finance.
 - Authored many pages of course material archived at <http://liu.edu/~kgursoy>.

HARDWARE AND SOFTWARE SKILLS Computer Programming:

- Assembler, FORTRAN, C

Numerical Analysis:

- MATLAB, Maple, R, SAS

Skills :

- Linear algebra, differential equations, Monte Carlo analysis, nonlinear numerical methods, statistics, stochastic optimization.

Desktop Editing and Productivity Software:

- Microsoft Office, OpenOffice.org, LibreOffice, Corel WordPerfect, Google Docs
- Vim, Emacs, Eclipse
- T_EX (L^AT_EX, B_IB_TE_X, P_STricks)

Operating Systems:

- Microsoft Windows family,
- Apple OS X,
- Linux, BSD, and other UNIX variants

BOOKS [1] Gürsoy, K., Baykal-Gürsoy, M., Gürsoy, A., *An Introduction to Probability and Statistics*, Kendall/Hunt Publishing Co., Dubuque, Iowa, 2015, ISBN 978-1-4652-7705-3.
[2] Gürsoy, K., *Management with Information Systems*, Kendall/Hunt Publishing Co., Dubuque, Iowa, 2003, ISBN 0-7575-0344-6.

REFEREED JOURNAL PUBLICATIONS [1] Gürsoy, K., "How to Measure and Predict Sustainability?" Proceedings of the Oxford Business and Economics Conference, July 2017.
[2] Gürsoy, K., "An Optimal Selection for Ensembles of Influential Projects", *Annals of Operations Research*, under review.
[3] Gürsoy, K., "Optimal Selections among Competing Projects: Multi-Armed Bandits", Proceedings of the Cambridge Business and Economics Conference, July 2014, pp. 1-9, ISBN 9780974211428

- [4] Gürsoy, K. and Baykal-Gürsoy, M., “Forecasting: State-Space Models and Kalman Filter Estimation”, Wiley Encyclopedia of Operations Research and Management Sciences, pp. 1-9, January 2011.
- [5] Baykal-Gürsoy, M. and Gürsoy, K., “Semi-Markov Decision Processes: Nonstandard Criteria,” Journal of Probability in the Engineering and Informational Systems, Vol. 21, No. 4, pp. 635-657, 2007.
- [6] Gürsoy, K., “An Exponential Model for Treatment Effects Without a Control Group,” Turkish Journal of Mathematics, Vol. 29, No. 2, pp. 193-200, 2005.
- [7] Nugent, E., Baykal-Gürsoy, M. and Gürsoy, K., “Residuals for k-Step-Ahead Controlled Processes and Related Monitoring Problems,” Journal of Quality & Reliability Engineering International, Vol. 21, No. 1, pp. 63-80, 2005.
- [8] Gürsoy, K. and Katehakis, M., “On Maximizing the Availability of Two Component Series Systems in Discrete Time,” American Journal of Mathematical and Management Sciences, Vol. 23, No. 1&2, pp. 61-73, 2003.
- [9] Gülcür, H.Ö., Akman, V. and Gürsoy, K., “CAD: An Adaptive Controller Based on the Extended Kalman Filter,” Proceedings of IFAC, pp. 452-473, 1982.

CONFERENCE
PRESENTATIONS

- [1] Extended Kalman Filter for Predicting Sustainability, Fall 2017 INFORMS Annual Conference, October 2017, Houston, Texas. *Chaired the Technology Management Session.*
- [2] How to Measure and Predict Sustainability? Oxford Business and Economics Conference, July 2017, Oxford University, Oxford, UK.
- [3] Random Dimensional Spaces, INFORMS Annual Meeting, November 2016, Nashville, Tennessee.
- [4] Moments of a Random Set, INFORMS Annual Meeting, November 2015, Philadelphia, Pennsylvania.
- [5] On Maximizing the Availability of Systems Composed of Repairable Components, 18th INFORMS Applied Probability Society Conference, July 2015, Koc University, Istanbul, Turkey.
- [6] Optimal Procurement: Case of A Cost Conscious Manufacturer, Fall 2014 Annual Meeting of INFORMS, San Francisco, California. *Chaired the Inventory Management Session.*
- [7] Optimal Selections among Competing Projects, Conference on Business & Economics Program, July 2014, Cambridge University, Cambridge, UK.
- [8] Influential Multi-Armed Bandits, Fall 2007 Conference of INFORMS, Seattle, Washington.
- [9] Random Graphs and Restricted Second Order Logic, Fall 2006 INFORMS Conference, Pittsburgh, Pennsylvania.
- [10] Evolving Bayesian Graphs, Fall 2005 INFORMS Conference, San Francisco, California.
- [11] Residuals for k-Step-Ahead Controlled Processes and Related Monitoring Problems, July 2003 INFORMS Conference, Istanbul, Turkey. *Chaired the Health Care Session.*
- [12] Alignment of Mammogram Pairs, Fall 2002 IEEE 2nd Joint EMBS-BMSE Conference, Houston, Texas.
- [13] Approximating the Stochastic Diffusion Equation by an Ordinary Differential Equation, Fall 2001 INFORMS Conference, Miami, Florida. *Chaired the Probability Session.*

- [14] Models of Repair Allocations in Discrete Time, Fall 2000 INFORMS Conference, San Antonio, Texas. *Chaired the Queuing and Inventory Control Session.*
- [15] Utilization of Statistics to Understand Causality, Spring 2000 INFORMS Conference, Salt Lake City, Utah.
- [16] On Maximizing the Reliability of Series Systems in Discrete Time, Fall 1999 INFORMS Conference, Philadelphia, Pennsylvania.
- [17] What We Could Use: Chaos Theory vs. Time-Series Analysis, 1998 International Conference of The Academy of Business Administration, July, Barcelona, Spain. *Chaired the Stochastic Processes and Their Applications Session.*
- [18] How to Treat All The Patients and Acquire Sufficient Information About the Treatment Effect, 1997 Conference of The Academy of Business Administration, April, Cancun, Mexico.
- [19] Hub and Spoke System Design with Concave Cost, Fall 1996 INFORMS Conference, Atlanta, Georgia.

AWARDS

- RBS Decanal Account for NTT Faculty Development, from September 2015.
- Rutgers University Open and Affordable Textbook grant, from January 2017.
- Rutgers Business Governing Association Best BAIT Professor Award for 2016-2017.
- Rutgers University Teaching Excellence Award for 20016-2017.

ACADEMIC SERVICE

Rutgers University Senate, Faculty and Personnel Affairs Committee
From 2014 to 2017.

RBS, Teaching Methods and Innovations Committee
Member.

RBS, New Brunswick Academic Standing Committee
Member.

RBS, Education Committee
Member.

The Business and Information Technology Society
Participated in many activities of this Rutgers student society.

Second, Third, and Fourth Rutgers Applied Probability Conferences
Member of the organization committees.

PROFESSIONAL SERVICE

Conference Service

- Chair of Several INFORMS sessions
- Chair of Several Academy of Business Administration sessions

Reviewer for Journals

- Annals of Operations Research
- Naval Research and Logistics
- Probability in the Engineering and Informational Sciences

Peer Review of Books

- Several book reviews on Information Systems, Operations Research, and Statistics for the Prentice Hall, John Wiley, and McGraw-Hill publishing companies
- *Causality*, by J. Pearl, Cambridge University Press, 2000

OTHER PROFESSIONAL ACTIVITIES

- Academic advisor of the Rutgers Business School Teams for the Johnson & Johnson 2014, 2015, 2016, and 2017 University Case Competitions.
- Academic advisor of the Kean College Society for the Advancement of Management.

PROFESSIONAL
MEMBERSHIPS

- INFORMS, The Institute for Operations Research and the Management Sciences
Member since 1996
- Applied Probability Society
Member since 1996
- *AMS*, American Mathematical Society
Member since 1992