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## Eitan Zemel

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**STERN SCHOOL  
OF BUSINESS**

### Education

1970 B.Sc. (Mathematics and Physics), The Hebrew University, Israel (with distinction).

1972 M.Sc. (Applied Physics), The Weizmann Institute of Science, Israel.

1976 Ph.D. (Operations Research), Carnegie-Mellon University.

### Academic Positions

1976 Assistant Professor of Decision Sciences, Kellogg Graduate School of Management, Northwestern University

1978 Associate Professor of Decision Sciences, Kellogg Graduation School of Management, Northwestern University

1981 Professor of Decision Sciences, Kellogg Graduate School of Management, Northwestern University

1988 - IBM Research Professor of Decision Sciences, Kellogg Graduate School of Management, Northwestern University

1992 Harold L. Stuart Professor of Operations Research, Kellogg Graduate School of Management, Northwestern University

1998 – present W. Edwards Deming Professor of Quality and Productivity, Stern School of Business, New York University

### Additional Academic Positions

1990 – 1992 Professor of Operation Research, The Faculty of Management – The Leon Recanati Graduate School of Business Administration

1992 – 1998 Professor of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Sciences, Northwestern University

2009 (Fall semester) Visiting Scholar, Graduate School of Business, Stanford University

2016-present Senior Advisor to the Provost, University of Chicago

### Administrative Positions

1985 – 1987	Chairman, Department of Managerial Economics and Decision Sciences, Kellogg Graduate School of Management, Northwestern University
1988 – 1998	Founding Co-Director, Masters of Management in Manufacturing Program (MMM Program), Kellogg Graduate School of Management and McCormick School of Engineering and Applied Sciences, Northwestern University
1998 – 1999	Founding Chairperson, Department of Operations Management, Stern School of Business, New York University
1999 – 2001	Vice Dean for MBA Programs, Stern School of Business, NYU
2001 – 2005	Founding Chairperson, Department of Information, Operation and Management Sciences, Stern School of Business, NYU
2005 – 2009	Vice Dean for Strategic Initiatives, Stern School of Business, NYU
2011 – Present	Vice Dean for Global and Executive Programs, Stern School of Business, NYU
2012 – 2015	Founding Dean of Business and Engineering, NYU Shanghai
2013 – Present	Associate Vice Chancellor for Strategy, NYU Shanghai

### Major Committees

2001	Co-Chair, The Stern 2001 Strategic Planning Committee, Stern School of Business, NYU
2003 – 2009 and 2011 - present	Member of the Board, the TRIUM Global Executive MBA Program (NYU Stern School Business, London School of Economics, Hautes Etudes Commerciales de Paris)
2004	Member, Search Committee, Dean of the Undergraduate College, Stern Business School, NYU
2007	Chair, The Stern 2007 Strategic Planning Committee, Stern School of Business, NYU
2009	Chair, Search Committee, Dean of the Stern Business School, Stern School of Business, NYU
2009 – 2015	Member, Provost's Academic Priorities Committee, NYU

## Publications

- E. Balas and E. Zemel, "Facets of the Knapsack Polytope from Minimal Covers," SIAM Journal on Applied Mathematics, 34 (1978), 119-148.
- A. Raviv and E. Zemel, "Durability of Capital Goods: Market Structure and Taxes," Econometrica, 45 (1977), 703-717.
- E. Balas and E. Zemel, "Graph Substitution and Set Packing Polytopes," Networks, 7 (1977), 267-284.
- E. Zemel, "Lifting the Facets of 0-1 Polytopes," Mathematical Programming, 15 (1978), 268-277.
- E. Balas and E. Zemel, "An Algorithm for Large Knapsack Problems," Operations Research, 28 (1980), 1412-1423.
- N. Megiddo, A. Tamir, E. Zemel, and R. Chandrasekaran, "An  $(n \log^2 n)$  Algorithm for the  $k$ th Longest Path in a Tree with Applications to Location Problems," SIAM Journal on Computing, 13 (1981), 328-338.
- E. Zemel, "Measuring the Quality of Approximate Solutions to Zero-One Programming Problems," Mathematics of Operations Research, 13 (1981), 319-332.
- A. A. Mitchell, T. E. Morton and E. Zemel, "A Discrete Maximum Principle Approach to General Advertising Expenditure Model," TIMS Studies in Management Science: Marketing, Planning Models (A. Zoltners, ed.), Amsterdam North-Holland Publishing (1981).
- E. Kalai and E. Zemel, "On Totally Balanced Games and Games of Flow," Mathematics of Operations Research, 7 (1982), 476-478.
- A. Tamir and E. Zemel, "Locating Centers on a Tree with Discontinuous Supply and Demand Regions," Mathematics of Operations Research, 7 (2), 1982, 183-198.
- E. Zemel, "On Search Over Rationals," Operations Research Letters, 1 (1), 1981, 34-38.
- E. Kalai and E. Zemel, "Generalized Network Problems Yielding Totally Balanced Games," Operations Research, 30 (4), 1982, 998-1008.
- E. Zemel, "Polynomial Algorithms for Estimating Best Possible Bounds on Network Reliability," Networks, 12 (1982), 439-452.
- D. Samet and E. Zemel, "On the Core and Dual Set of Linear Programming Games," Mathematics of Operations Research, 9 (1984), 309-316.
- E. Zemel, "An  $O(n)$  Algorithm for the Multiple Choice Knapsack and Related Problems," Information Processing Letters, 18 (1984), 439-452.
- E. Balas and E. Zemel, "Lifting and Complementing Yields all the Facets of Positive Zero-one Polytopes," in: R. W. Cottle, H. L. Kelmanson, and B. Korte (eds.), Mathematical Programming, (Amsterdam: North Holland, 1984, pp. 13-24).

- L. Hakimi, N. Megiddo and E. Zemel, "The Maximum Coverage Location Problem," SIAM Journal on Discrete and Algebraic Methods, 6 (1984), 189-200.
- R. Hassin and E. Zemel, "On Shortest Paths in Graphs with Random Weights," Mathematics of Operations Research, 10 (1984), 557-564.
- E. Zemel, "Probabilistic Analysis of Geometric Location Problems," Annals of Operations Research, 1 (1984), 215-238.
- E. Zemel, "Probabilistic Analysis of Geometric Location Problems (Revised)," SIAM Journal of Discrete and Algebraic Methods, 6 (1986), 189-200.
- N. Megiddo and E. Zemel, "An  $O(n \log n)$  Randomized Algorithm for the Weighted Euclidean One Center Problem in the Plane," Journal of Algorithms, 7 (1986), 358-368.
- E. Zemel, "Random Binary Search: A Randomized Algorithm for Optimization in  $R^1$ ," Mathematics of Operations Research, 11 (1986), 651-662.
- E. Zemel, "A Linear Time Randomizing Algorithm for Searching Ranked Functions," Algorithmica, 2 (1987), 81-90.
- R. Hassin and E. Zemel, "Probabilistic Analysis of the Capacitated Transportation Problem," Mathematics of Operations Research, 13 (1988), 80-90.
- E. Balas, R. Naus and E. Zemel, "A Comment on Some Computational Results on Real 0-1 Knapsack Problems," Operations Research Letters, 6 (1987), 139-141.
- E. Zemel, "Small Talk and Cooperation: A Note on Bounded Rationality," Journal of Economic Theory, 49 (1989), 1-9.
- E. Zemel, "Easily Computable Facets of the Knapsack Problem," Mathematics of Operations Research, 14 (1989), 760-774.
- D. Hartvigsen and E. Zemel, "Is Every Cycle Basis Fundamental?", Journal of Graph Theory, 13 (1989), 117-137.
- I. Gilboa and E. Zemel, "Nash and Correlated Equilibria: Some Complexity Results," Games and Economic Behavior, 1 (1989), 80-93.
- I. Gilboa, E. Kalai and E. Zemel, "On the Order of Eliminating Dominated Strategies," Operations Research Letters, 9 (1990), 85-89.
- T. Kuno, H. Konno and E. Zemel, "A Linear Time Algorithm for Solving Continuous Maximin Knapsack Problems," O.R. Letters, 10 (1991), 23-27.
- Z. Drezner and E. Zemel, "Competitive Location in the Plane," Annals of Operations Research, 1992.
- D. Hartvigsen and E. Zemel, "On the Computational Complexity of Facets and Valid Inequalities for the Knapsack Problem," Discrete Applied Math., 39 (1992), 113-123.

I. Gilboa, E. Kalai and E. Zemel, "On the Computation Complexity of Eliminating Dominated Strategies" Math. of O.R., 18, (1993), 553-565.

Woodruff, D. and E. Zemel, "Hashing Vectors for Tabu Search," Annals of O.R., 41 (1993), 123-137.

C. Ocana and E. Zemel, "Learning From Mistakes: The JIT Principle," Operations Research, 49 (1996), 206-215.

M. Kamien and E. Zemel, "Tangled Webs: A Note on the Complexity of Compound Lying," 1994, Northwestern University

Y. Bassok, R. Anupindi and E. Zemel, "A General framework for the Study of Decentralized Distribution Systems" MSOR, Vol 3, No 4 (2001), 349-368

Y.-J. Chen, S. Seshadri, and E. Zemel,, "Sourcing through auctions and audits," Production and Operations Management, 10, (2009) (Lead Article March April issue)

A. Sheopuri and E. Zemel, "A Note on the Greed and Regret Problem", EJOR, to appear, 2010

#### Books:

R. Anupindi, S. Chopra, S. Deshmukh, Y. Van Mieghem, E. Zemel, "Managing Business Flows", 1996, Northwestern University.

#### Chapters in Books:

Viral V. Acharya, Jennifer Carpenter, Xavier Gabaix, Kose John, Matthew Richardson, Marti Subrahmanyam, Rangarajan Sundaram and Eitan Zemel, "Corporate Governance in the Modern Financial Sector" Chapter 7 in "Restoring Financial Stability: Recommendations From NYU Stern", Eds. Viral Acharia and Matthew Richardson, Wiley, 2009

#### Software:

"BeerNet" (with Y. Bassok and R. Anupindi), 1997.

#### Management Simulations:

"JDZ Production", 1992, (The Toyota Production System, The Work Cell concept, Synchronization of production systems)

"The Universal Printing Company", 1994, Revised 2015, (Process Re-engineering)

#### Cases:

"The Ford – Firestone Case", with Michael Pinedo and Sridhar Seshadri, 2002

"The Toyota Recall", with David Austen-Smith and Daniel Diermeier, Kellogg School of Management, Northwestern University, 2010

Numerous teaching cases, (Capacity Management, Cycle Time Management, Quality Management, Operational Focus, Optimization, Process Improvement), 1990-current

### Professional Activities

Member, Advisory Board, *Electronic Commerce Research*

Founding Member, Advisory Board, The Utah Operations Conference, 2007-present

Member, Lancaster Prize Committee, 1990

Served as Associate Editor for: *Manufacturing Review*, *Production and Operations Management*, *Management Science*, *Journal of Operations Management*, *M&SOM*

### Executive Education Activities

Instructor, academic director and founder in/of numerous executive education programs at Kellogg, Stern and other schools. Specialties include: process view of the firm, leadership through processes, operations management, quality management, customer satisfaction, operations strategy, R&D management, risk management, focus and managing complexity.

Led a major restructuring of Stern's Executive MBA programs

Led the launching of TRIUM Global Executive Program (joint with LSE and HEC), the Master of Science in Global Finance (joint with HKUST), the Master of Science in Risk Management, and the Master of Science in Business Analytics.

Founded and managed Stern's Global and Executive Programs Group

### Consulting Activities

Consultant and instructor at numerous organizations, especially in the manufacturing and health care sectors.

Member of the board of advisors, Tenlegs Networks (a software startup); 2015 - present

Member of the board, GE Strategic Railcar Services (a startup within GE Capital Rail Services Corporation); 1994-95