

S. SELCUK ERENGUC  
Professor of Information Systems and Operations Management  
The University of Florida

### EDUCATIONAL BACKGROUND

B.B.A., American University of Beirut, June 1971  
M.B.A., American University of Beirut, March, 1974  
D.B.A., Indiana University, September 1980

### ACADEMIC APPOINTMENTS

Senior Associate Dean and Director of the Hough Graduate School of Business, Warrington College of Business Administration, January 2004 to present

PricewaterhouseCoopers Professor of Decision and Information Sciences, July 1999 to August 2009.

Chairman, Department of Decision and Information Sciences, August 1993 to December 2002.

American Economic Institutions Professor of Decision and Information Sciences, July 1997-July 1999.

Knight-Ridder Professor of Decision and Information Sciences, August 1992 to August 1993, and August 1994 to July 1997

Visiting Professor of Operations Management, Consortium International Master of Business Administration, Asolo, Italy, 1998.

Visiting Professor of Operations Management International Institute of Business Studies, Pordenone, Italy and Munich Germany, 1992.

Professor of Decision and Information Sciences, Department of Decision and Information Sciences, University of Florida, 1991 to present.

Associate Professor of Decision and Information Sciences, Department of Decision and Information Sciences, University of Florida, July, 1987 to July 1991. (**Tenure awarded 1987**)

Member of the Graduate Faculty, University of Florida, 1983 to present.

Assistant Professor of Decision and Information Sciences, Department of Decision and Information Sciences, University of Florida, August, 1982 to July, 1987.

Assistant Professor of Management Science, Academic Faculty of Management Sciences, The Ohio State University, Columbus, Ohio, September, 1981 to July, 1982.

## **Selcuk Erenguc**

Visiting Assistant Professor of Quantitative Business Analysis, Department of Quantitative Business Analysis, Indiana University, Bloomington, Indiana, August 1980 to June 1981.

Part-time Lecturer of Quantitative Business Analysis, Department of Quantitative Business Analysis, Indiana University, Bloomington, Indiana, August, 1979 to May, 1980.

Associate Instructor of Quantitative Business Analysis, Department of Quantitative Business Analysis, Indiana University, Bloomington, Indiana, August, 1978 to May, 1979.

Lecturer of Statistics, Academy of Commercial and Economic Sciences, Adana, Turkey, March, 1973 to December, 1976.

### **TEACHING**

#### **Taught Courses in the Following Areas:**

Enterprise Resource Planning, Manufacturing Planning and Control, Mathematical Programming, Production and Operations Management, Project Management, Simulation, Supply Chain Management, Statistics.

#### **Dissertation Committees Served on:**

Served as chair, co-chair or committee member on more than 50 dissertation committees, most of which were either in Business Administration or Industrial and Systems Engineering.

### **PUBLICATIONS**

#### **Publications in Refereed Journals:**

"Some Branch-and-Bound Procedures for Fixed-Cost Transportation Problems," Naval Research Logistics Quarterly, Vol. 31, No. 1, March, 1984, pp. 145-154. (with A.V. Cabot)

"A Non-Dual Approach to Sensitivity Analysis - The Right-Hand-Side Case," Decision Sciences, Vol. 16, No. 2, Spring, 1985, pp. 223-229. (with H. R. Fogler and A. Majthay)

"An Algorithm for Solving a Structured Class of Linear Programming Problems," Operations Research Letters, Vol. 4, No. 6, April, 1986, pp. 293-299.

"The Interactive Fixed Charge Linear Programming Problem," Naval Research Logistics Quarterly, Vol. 33, No. 2, May, 1986, pp. 157-177. (with H. P. Benson)

"Improved Penalties for Fixed Cost Linear Programs Using Lagrangean Relaxation," Management Science, Vol. 32, No. 7, July, 1986, pp. 856-869. (with A.V. Cabot)

**Selcuk Erenguc**

"On the Weighted Selection Algorithm for Certain Linear Programs with Nested Constraint Coefficients," Operations Research, Vol. 34, No. 4, July-August, 1986, pp. 650-653. (with H. P. Benson)

"A Branch and Bound Algorithm for Solving a Class of Nonlinear Integer Programming Problems," Naval Research Logistics Quarterly, Vol. 33, No. 4, November, 1986, pp. 559-567. (with A.V. Cabot)

"A Branch and Bound Algorithm for a Single-Item Multi-Source Dynamic Lot Sizing Problem with Capacity Constraints," IIE Transactions, Vol. 19, No. 1, March, 1987, pp. 73-80. (with S. Tufekci)

"Multiproduct Dynamic Lot-Sizing Model with Coordinated Replenishments," Naval Research Logistics, Vol. 35, No. 1, February, 1988, pp. 1-22.

"A Transportation Type Aggregate Production Model with Bounds on Inventory and Backordering," European Journal of Operational Research, Vol. 35, No. 3, June, 1988, pp. 414-425. (with S. Tufekci)

"Using Convex Envelopes to Solve the Interactive Fixed-Charge Linear Programming Problem," Journal of Optimization Theory and Applications, Vol., 59, No. 2, November, 1988, pp. 223-246. (with H. P. Benson)

"Multi-Item Inventory Models with Co-ordinated Replenishments: A Survey," International Journal of Operations and Production Management, Vol. 8, No. 1, 1988, pp. 63-73. Also reprinted in Operations Management Bibliographies and Reviews Vol. 14, No. 2, 1988, pp. 5-15. (with Y. Aksoy)

"On the Joint Lot-Sizing Problem with Zero Setup Costs," Decision Sciences, Vol. 20, No. 4, Fall, 1989, pp. 669-676. (with H. M. Mercan)

"A Multifamily Dynamic Lot-Sizing Model with Coordinated Replenishments," Naval Research Logistics, Vol. 37, No. 4, August, 1990, pp. 539-558. (with H. M. Mercan)

"An Algorithm for Concave Integer Minimization over a Polyhedron," Naval Research Logistics, Vol. 37, No. 4, August, 1990, pp. 515-525. (with H. P. Benson)

"Minimizing Misclassifications in Linear Discriminant Analysis," Decision Sciences, Vol. 21, No. 1, Winter, 1990, pp. 63-85. (with G. J. Koehler)

"A Branch and Bound Algorithm for a Single Item Nonconvex Dynamic Lot Sizing Problem with Capacity Constraints," Computers and Operations Research, Vol. 17, No. 2, 1990, pp. 199-210. (with Y. Aksoy)

**Selcuk Erenguc**

"Survey of Mathematical Programming Models and Experimental Results for Linear Discriminant Analysis," Managerial and Decision Economics, Vol. 11, No. 4, 1990, pp. 215-225. (with G. J. Koehler)

"A Note on Adapting Methods for Continuous Global Optimization to the Discrete Case," Annals of Operations Research, Vol. 25, 1990, pp. 243-252. (with H.P. Benson and R. Horst)

"An Algorithm for Indefinite Integer Quadratic Programming," Computers and Mathematics with Applications, Vol. 21, No. 6/7, 1991, pp. 67-76. (with H. P. Benson)

"Solving Time/Cost Trade-off Problems with Discounted Cash Flows Using Generalized Benders Decomposition," Naval Research Logistics, Vol. 40, No. 1, 1993, pp. 25-50. (with S. Tufekci and C. Zappe)

"A Multi-Family Dynamic Lot-Sizing Problem with Coordinated Replenishments: A Heuristic Procedure," International Journal of Production Research, Vol. 31, No. 1, 1993, pp. 173-189. (with H. M. Mercan)

"Project Scheduling Problems: A Survey," International Journal of Operations and Production Management, Vol. 13, No. 11, 1993, pp. 80-91. (with O. Icmeli and C. Zappe)

"A Polynomial Algorithm for a Multi-Item Capacitated Production Planning Problem," Operations Research Letters, Vol. 13, No. 5, 1993, pp. 287-293. (with M. Denizel-Sivri)

"A Branch and Bound Procedure for Setup Problems on Flexible Manufacturing Systems," Production and Operations Management, Vol. 2, No. 4, 1993, pp. 289-305. (with M. Denizel-Sivri)

"A Tabu Search Adaptation to Resource Constrained Project Scheduling Problem with Discounted Cash Flows," Computers and Operations Research, Vol. 21, No. 8, 1994, pp. 841-854. (with O. Icmeli)

"Multiple Stage Production Planning Research: History and Opportunities". International Journal of Operations and Production Management, Vol. 16, No. 6, 1996, pp. 25-40. (with N. C. Simpson)

"A Branch and Bound Procedure for the Resource Constrained Project Scheduling Problem with Discounted Cash Flows." Management Science, Vol. 42, No. 10, 1996, pp. 1395-1408. (with O. Icmeli)

"Convex Envelope Results and Strong Formulations for a Class of Integer and Mixed Integer Problems," Naval Research Logistics, Vol. 43, No. 4, 1996, pp. 503-518. (with M. Denizel-Sivri and H. Sherali)

## Selcuk Erenguc

"The Resource Constrained Time/Cost Tradeoff Project Scheduling Problem with Discounted Cash Flows," Journal of Operations Management, Vol. 14, No. 3, 1996, pp. 255-275. (with O. Icmeli)

"Dynamic Lot Sizing with Setup Cost Reduction," European Journal of Operational Research, Vol. 100, 1997, pp. - 537 -549. (with M. Denizel and H. P. Benson)

"Exact Solution Procedures for a Class of Production Planning Problems in Flexible Manufacturing Systems," Computers and Operations Research, Vol.24, No. 11, 1997, pp. 1043-1055. (with M. Denizel-Sivri)

"Resource Constrained Project Scheduling Problem with Multiple Crashable Modes: A Heuristic Procedure", European Journal of Operational Research, Vol. 107, 1998, pp. 250-259. (with T. Ahn)

"A Methodology for Integrating cell Formation and Production Planning in Cellular Manufacturing," Annals of Operations Research, Vol.77, 1998, pp. 1 – 21. (with J. Schaller and A. Vakharia)

"Improved Heuristic Methods for Multiple Stage Production Planning," Computers and Operations Research, Vol. 25, No: 7-8, 1998, pp. 611-623. (with N. C. Simpson)

"Optimization Based Audit Planning: A Spreadsheet Modeling Approach," Internal Auditing, July – August 1998, pp. 16–23. (with N. S. Erenguc)

"Integrated Production/Distribution Planning in Supply Chains: An Invited Review," European Journal of Operational Research, Vol. 115, 1999, pp. 219-236. (with N. Simpson and A. Vakharia)

"Integrating Quality as a measure of Performance in Resource-Constrained Project Scheduling Problems," Project Scheduling: Recent Models, Algorithms and Applications, Ed., Jan Weglarz, Kluwer Publishing, 1999 (with O. Icmeli-Tukel).

"A mathematical Approach for Integrating the Cell Design and Production Planning Decision," International Journal of Production Research, Vol. 38, No:16, 2000,pp. 3953-3971 (with J. Schaller and A. Vakharia).

"Modeling the Order Picking Function in Supply Chain Management Systems: Formulation, Implementation and Insights," IIE Transactions, Vol. 32, No:2, 2001, pp. 119-130 (with N. C. Simpson).

"Resource Constrained Project Scheduling Problem with Multiple Crashable Modes: An Exact Solution Method," Naval Research Logistics, Vol.48, 2001, pp.107-127 (with T. Ahn and D. G. Conway).

## Selcuk Erenguc

“Tool Capacity Planning in Semi-Conductor Manufacturing,” Computers and Operations Research, Vol.30, No:9, 2003, pp.1349-1366 (with B. Catay and A. Vakharia).

“ Outsourcing Inventory Management Decisions in Healthcare: Models and Applications,” European Journal of Operational Research, Vol. 154, No:1, 2004 pp. 271-290 (with L. Nicholson and A. Vakharia).

“Capacity Allocation with Machine Duplication in Semi-Conductor Manufacturing.” Naval Research Logistics, Vol. 52, No. 7, 2005, pp. 659-667 (with B. Catay and A. Vakharia).

“ Modeling Multiple Stage Manufacturing Systems with Generalized Costs and Capacity Issues,” Naval Research Logistics, Vol. 52, No. 6, 2005, pp. 560-570 (with N.C. Simpson).

“A Methodology for Component Grouping and Printed Circuit Board Scheduling in an Openshop Manufacturing Environment,” International Journal of Advanced Manufacturing Technology, Vol. 29, 2006, pp. 980-989 (with B. Catay and A. Vakharia).

"Resource-Constrained Project Scheduling Problem: A Hybrid Neural Approach," Perspectives in Modern Scheduling, Eds. Jan Weglarz and Joanna Jozefowska, 2006 (with A. Agarwal and S. Colak).

“Provider Selection and Task Allocation Issues in Networks with Different QoS Levels and All You Can Send Pricing,” Decision Support Systems , Vol.43, No.2, 2007, pp.375-389 (with N. Kasap and H. Aytug).

“Optimal Requirement Allocation Among Quantity-Discount Quoting Suppliers,” Operations Management Research, Vol.1, No.1, 2008, pp. 53-60 (with Gerard Burke and Asoo Vakharia).

“ A Neurogenetic Approach for the Resource-Constrained Project Scheduling Problem,” Computers and Operations Research, Vol. 38, No.1, pp. 44-50, January 2011, (with A. Agarwal and S. Colak)

“ Multi-Mode Resource-Constrained Project Scheduling Problem with Renewable Resources: New Solution Approaches,” Journal of Business and Economics Research, forthcoming, 2013, (with A. Agarwal and S. Colak)

### **Publications in Refereed Proceedings:**

“Fixed Charge Transportation Problems and Equivalent Integer Programming," Proceedings, 12th Annual Meeting, American Institute for Decision Sciences, Vol. 2, November, 1980, pp. 123-125. (with A. V. Cabot)

## Selcuk Erenguc

"An Algorithm for a Single Item Multi- Source Dynamic Lot Sizing Problem with Capacity Constraints," Proceedings, 16th Annual Meeting, American Institute for Decision Sciences, November 1984, pp. 695-699. (with S. Tufekci)

"A Branch and Bound Algorithm for a Multi-Product Dynamic Lot Sizing Model with Individual and Joint Setup Costs," Proceedings, 1985 Annual Meeting, American Institute for Decision Sciences, Las Vegas, Vol. 1, November, 1985, pp. 434-436.

"On A Class of Capacitated Dynamic Lot Sizing Problems," Proceedings, 1987 Annual Meeting, Decision Sciences Institute, Boston, Vol. 2, November, 1987, pp. 669-670. (with Y. Aksoy)

"A Multi-Family Capacitated Dynamic Lot-Sizing Model With Coordinated Replenishments," Proceedings, 1988 Annual Meeting, Decision Sciences Institute, Las Vegas, Vol. 2, November, 1988, pp. 1130-1132. (with H. M. Mercan)

"A Multi-Family Capacitated Dynamic Lot-Sizing Model with Coordinated Replenishments: A Heuristic Procedure," Proceedings, 1989 Annual Meeting, Decision Sciences Institute, New Orleans, Vol. 2, November, 1989, pp. 974-976. (with H. M. Mercan)

"Production Planning in A Flexible Manufacturing Environment," Proceedings, 1991 Annual Meeting, Decision Sciences Institute, Miami, pp. 1206-1208. (with M. Denizel-Sivri)

"An Improved Heuristic for Multiple Level Lot Sizing," Proceedings, 1993 Annual Meeting of the Decision Sciences Institute, Boston, 1993, (with N. C. Simpson)

"The Resource Constrained Project Scheduling Problem with Multiple Crashable Modes: A Heuristic Procedure," Proceedings, The Fifth International Workshop in Project Management and Scheduling, Poznan, Poland, 1996, pp. 23-26. (with T. Ahn)

"Cell Design under Time-Varying Demand: Integrating Cell Formation and Production Planning," Proceedings, 1996 Annual Meeting of the Decision Sciences Institute, Orlando, 1996, pp. 1267-69. (with J. E. Schaller and A. Vakharia)

"Using Quality as a Measure of Performance in Constrained Project Scheduling," Proceedings, The Sixth International Workshop in Project Management and Scheduling, Istanbul, Turkey, 1998, pp. 54-57. (with O. Icmeli Tukel)

"Planning and Controlling Multiple Interdependent Projects: A Case Study," Proceedings, The Sixth International Workshop in Project Management and Scheduling, Istanbul, Turkey, 1998, p. 31. (with H. Demirkan).

"Resource Constrained Project Scheduling: The Augmented Neural Network Approach", extended abstract, Proceedings of the 9th International Workshop in Project Management and Scheduling, Nancy, France, 2004. (with A. Agarwal and S. Colak)

## **Selcuk Erenguc**

" Non-Greedy Heuristics and Adaptive Metaheuristics for the Multi-Mode Resource-Constrained Project-Scheduling Problem with Renewable Resources", extended abstract, Proceedings of the 10th International Workshop in Project Management and Scheduling, Poznan, Poland, 2006. (with A. Agarwal and S. Colak)

" The Resource Constrained Project Scheduling with Multiple Crashable Modes: A Heuristic Approach," Abstract in INFORMS conference proceedings, San Francisco, 2005. (with A. Agarwal and S. Colak)

### **Papers Presented at Professional Meetings**

More than 60 papers presented at professional meetings

### **Book Review**

"Elements of Simulation," Morgan, Byron J.T., Interfaces, Vol. 18, No. 3, May-June, 1988, pp. 120-121.

### **Papers Submitted for Publication**

“The Multi-Mode Resource-Constrained Project-Scheduling Problem with Renewable Resources: New Solution Approaches”, (with S. Colak and A. Agarwal)

### **GRANTS**

Project leader, SAP Software Grant, worth \$1,200,000, 1998

### **PROFESSIONAL ACTIVITIES**

Member, INFORMS

Member, Decision Sciences Institute

Member, Production and Operations Management Society

Associate Editor, Journal of Operations Management ( 1995 to 2002)

Editorial Advisory Board, Journal of Operations Management (2002- )

Associate Editor, Naval Research Logistics (1989 to 2003)

Area Editor, Production and Operations Management (1997 to 2003 )

Special Issue Co-Editor, Naval Research Logistics ( 1987 – 1988)

Special Issue Co-Editor, Managerial and Decision Economics (1989-1990)

Special Issue Editor, Journal of Operations Management (1988-1989, 1993-1994)

Special Issue Co-Editor, Computers and Operations Research ( (1991-92)

Special Issue Editor, IEEE Transactions on Engineering Management (1992-1993)

Special Issue Editor, Production and Operations Management (1994-1995)

Special Issue Co-Editor, European Journal of Operational Research ( 1998-1999)



## **Selcuk Erenguc**

Ad-Hoc Referee for: Annals of Operations Research  
Computers and Operations Research  
Decision Sciences  
European Journal of Operational Research  
International Journal of Operations and Production Management  
Journal of Operations Management  
Management Science  
Mathematics of Operations Research  
Naval Research Logistics  
Operations Research  
Production and Operations Management

Program Chair, INFORMS meeting, Miami, November 2001  
Track Chair for MS/OR Techniques, Models and Applications, Decision Sciences Institute Meeting, San Diego November, 2002  
Chaired numerous sessions in the National and International meetings of the Professional Organizations of which I am a member.

## **REFERENCES**

Provided upon request

Address:

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Graduate School of Business  
University of Florida  
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