# **CURRICULUM VITA**

# Jonathan S. Yormark, Ph.D.

# AREAS OF PROFESSIONAL INTEREST AND SPECIALIZATION

Computer-based planning support systems; planning systems for operations management; management science applications in finance; mathematical modeling and applied optimization; dynamic and integer programming. Computer systems design and development; computer network design and development.

Particular interest is in the development of computerized modeling tools for operations and financial management and long-range planning. Current research includes applications of parametric and nonlinear integer programming in discrete asset portfolio management.

# **EDUCATION**

B.S.	1966	College of the City of New York, New York City, Mechanical Engineering
M.S.I.E.	1968	Purdue University, Lafayette, Indiana
Ph.D.	1970	Purdue University, Lafayette, Indiana, Operations Research/Management Science

# DISSERTATION

"A Two-Dimensional Resource Allocation Problem"

### **EMPLOYMENT**

2004-	Director, Center for Global Logistics & Supply Chain, Marshall School of Business, University of Southern California
1996-00	Chief Information Officer and Associate Dean for Information Resources, Marshall School of Business, University of Southern California
1993-96	Chief Information Officer and Director of Information Resources, Graduate School of Business Administration, University of Southern California
1989-	University of Southern California, Graduate School of Business Administration, Department of Information and Operations Management; Associate Professor
1988-	Director - Information Resources, Graduate School of Business Administration, University of Southern California
1987-88	Director - Distributed Computing Services Division, University Computing Services, University of Southern California

1978-89	University of Southern California, Graduate School of Business Administration, Department of Finance and Business Economics; Associate Professor
1973-78	University of Southern California, Graduate School of Business Administration, Quantitative Business Analysis Department; Assistant Professor
1971-72	University of Southern California, School of Engineering, Industrial and Systems Engineering; Adjunct Assistant Professor
1971-73	Jet Propulsion Laboratory, CalTech, Pasadena, California, Operations Research; Civil Systems staff
1969-71	The RAND Corporation, Santa Monica, California, Management Sciences Department; Research Staff
1966	IBM Corporation, Brooklyn, New York; Systems Engineer
1965	Svenska Kullager Fabriken, Gothenburg, Sweden; Engineering trainee in International Exchange Program, IAESTE

## REFEREED PUBLICATIONS

- 1. "Mean-Variance Analysis for Indivisible Assets," <u>OMEGA: The International Journal of Management Science</u>, Vol. 9 (1980), No. 1, (with M.C. Findlay, R.D. McBride, and S. Messner).
- 2. "Finding All Solutions for a Class of Parametric Quadratic Integer Programming Problems," <u>Management Science</u>, Vol 26 (1980), No. 8, (with R.D. McBride).
- 3. "An Implicit Enumeration Algorithm for Quadratic Integer Programming," <u>Management Science</u>, Vol. 26 (1980), No. 3, (with R.D. McBride).
- 4. "Optimal Real Estate Portfolios," <u>Journal of the American Real Estate and Urban Economics Association</u>, Vol. 7 (1979), No. 3, (with M.C. Findlay, S. Messner, and C.W. Hamilton.)
- 5. "Accelerating Greenberg's Method for the Computation of Knapsack Functions," <u>Journal of Mathematical Analysis and Applications</u>, Vol. 49 (1975), No. 3.
- 6. "More on Min-Max Allocation," Management Science, Vol. 18 (1972), No. 9, (with E.L. Porteus).
- 7. "PRT Performance Requirements and Allocation," (invited) appears in Chapter IV, <u>Personal Rapid Transit</u>, J. Anderson, J. Dais, W.L. Gerrard, and A.L. Kornhauser, (eds.), University of Minnesota Press, Minneapolis, Minnesota, 1972, (with D.B. Smith).

# BOOKS

1. "Optimal Real Estate Portfolios", reprinted as Chapter 9 in <u>Real Estate Portfolio Analysis</u>, Findlay, Messner, and Tarantello, eds., Lexington Books, D.C. Heath Publishers, 1983.

#### RESEARCH GRANTS

- 1974 Co-Principal Investigator; "Fuel Supply Systems Management," \$55,000 grant sponsored by Southern California Edison Company (with C.W. Hamilton and J.B. Holton).
- "Calculating FMRR Efficient Frontiers for Portfolios of Real Estate Assets," \$3,500 grant sponsored by the Center for Real Estate and Urban Economic Studies, University of Connecticut.

# **PRESENTATIONS**

# Papers Presented at National Meetings of Professional Societies

- 1. "Efficient Frontiers for a Class of Nonseparable Generalized Knapsack Problems," presented at the Joint National ORSA/TIMS Meeting, Washington, D.C., May 4-7, 1980.
- 2. "Resource Parametric Solutions for Nonlinear Multidimensional Knapsack Problems," presented at XXIV International TIMS Meeting, Honolulu, June 18-22, 1979.
- 3. "A Parametric Mixed-Integer Programming Model with Applications in Finance," presented at the Joint National ORSA/TIMS Meeting, New Orleans, April 30-May 2, 1979 (with R.D. McBride).
- 4. "An Implicit Enumeration Algorithm for Quadratic Integer Programming," presented at the Joint National ORSA/TIMS Meeting, Los Angeles, November 13-15, 1978.
- 5. Chaired session on Parametric Integer Programming, Joint National ORSA/TIMS Meeting, Los Angeles, November 13-15, 1978.
- 6. "Efficient Frontiers for Discrete Asset Portfolios," presented at the Western Finance Association Meeting, Honolulu, June 20-26, 1978 (with R.D. McBride).
- 7. "Parametric Integer Programming in the Resources," presented at the Joint National ORSA/TIMS Meeting, New York City, May 1-3, 1978 (with R.D. McBride).
- 8. Chaired session on Parametric Analysis in Integer Programming, Joint National ORSA/TIMS Meeting, New York City, May 1-3, 1978.
- 9. "Finding the Efficient Frontier for a Discrete Asset Portfolio Selection Model Under Zero Covariance," presented at the Joint National ORSA/TIMS Meeting, Atlanta, November 7-9, 1977.
- 10. "Parametric Integer Programming for Capital Budgeting," presented at the Joint National ORSA/TIMS Meeting, Atlanta, November 7-9, 1977 (with R.D. McBride).
- 11. Chaired session on Financial Planning in Practice: 4 Case Studies, sponsored by College on the Practice of Management Science, Joint National ORSA/TIMS Meeting, Atlanta, November 7-9, 1977.
- 12. "The Efficient Set of Real Estate Portfolios," 1977 Colloquium on Computer Applications in Real Estate, Atlanta, November 3-4, 1977.
- 13. "Efficient Frontiers Under Full Funds Utilization," presented at Joint National ORSA/TIMS Meeting,

San Francisco, May 9-11, 1977.

## PRESENTATIONS (Continued)

- 14. Special Panel Session on Implementation of Management Science- Academic-Practitioner Dialogue, sponsored by College on the Practice of Management Science, Joint National ORSA/TIMS Meeting, San Francisco, May 9-11, 1977.
- 15. Chaired session on Planning in Practice, sponsored by College on the Practice of Management Science, Joint National ORSA/TIMS Meeting, San Francisco, May 9-11, 1977.
- Chaired session of Management Science Applications in the Electric Power Industry, sponsored by College on the Practice of Management Science, Joint National ORSA/TIMS Meeting, Miami, November 3-5, 1976.
- 17. "A Model of Faculty Retirement Alternatives," invited paper presented at the Joint National ORSA/TIMS Meeting, Las Vegas, November 17-19, 1975 (with P. Gray).
- 18. "A Flashlight for St. Jude: A Successful Application of Mixed Integer Programming in the Electric Power Industry," presented at the Joint National ORSA/TIMS Meeting, Chicago, April 30-May 2, 1975 (with C.W. Hamilton, J.B. Holton, and R.D. McBride).
- 19. Chaired session on Transportation Science in the Public Interest, sponsored by ORSA Transportation Science Section, 45th National ORSA Meeting, San Juan, October 16-18, 1974.
- Chaired session on Operational Strategies for Advanced Automated Transit Systems, sponsored by ORSA Transportation Science Section, 44th National ORSA Meeting, San Diego, November 12-14, 1973.
- 21. "Accelerating Greenberg's Method for the Computation of Knapsack Functions," presented at the 42nd National ORSA Meeting, Atlantic City, November 8-10, 1972.
- 22. "Contingency Headway Analysis for Ground Transportation Systems: An Analytical Approach," presented at the 40th National ORSA Meeting, Anaheim, October 25-29, 1971 (with D.B. Smith).
- 23. "On a Two-Dimensional Resource Allocation Problem," presented at the 39th National ORSA Meeting, Dallas, May 5-7, 1971.
- 24. "Resource Allocation, Two-Dimensional Constraints, and Discrete Dynamic Programming," presented at the 34th National ORSA Meeting, Philadelphia, November 1968 (with N.R. Baker).

# Presentations to Local Meetings of Professional Societies

"A Lightbulb to St. Jude: A Successful Application of Mixed Integer Programming in the Electric Power Industry," to the Civil Systems Group, Jet Propulsion Laboratory, February 21, 1975.

"A Successful Application of Management Science," to the Los Angeles Chapter, American Institute of Industrial Engineers, May 14, 1975. Also presented to the Southern California Chapter, the Institute of Management Sciences, September 25, 1975.

### RESEARCH REPORTS

"Estimating Minority Undercounting in Urban Areas and the Implications for Government Revenue Sharing," USC-GSBA Working Paper #14, October 1976 (with N. Minter).

"Fuel Supply Systems Management: A Case Study in Systems Planning and Control," July 1976 (with C.W. Hamilton, J.B. Holton, and R.D. McBride).

"A Two-Dimensional Resource Allocation Problem," with N.R. Baker, Report #33, Purdue Laboratory for Applied Industrial Control, Lafayette, Indiana, August 1970 (Doctoral dissertation).

### **TEACHING**

### Doctoral Committees of:

William Heitzman, doctoral candidate in Management Nancy Minter, doctoral candidate in Urban Planning Richard Perle, doctoral student in Marketing Anil Gupta, doctoral student in Quantitative Analysis/Finance

### Directed Research:

John Holtzman

Coach of USC National Business Case Competition Team - University of Virginia: 1982, 1983, 1987. Won first prize 1982, 2nd prize 1983, 1987

Developed strategic pricing simulation game for Executive Programs - 1983

Jeweler's Executive Program

Developed Competitive Strategic Simulation for Executive Programs-1984-86

# UNIVERSITY SERVICE

GSBA Research Committee 1974-1977

Commencement Committee 1977, 1978

Academic Standards Committee 1979-1985

Chairman, Academic Standards Committee 1980, 1981

Departmental Curriculum Committee 1976

Candidate Screening Committee 1977, 1978

Uniform Exam Administrator 1977

Computing and Information Systems Task Force 1983-84

Project Socrates Task Force 1984, 1985

Director, Project Socrates for Business School 1985, 1986, 1987

Executive Programs Advisory Board 1985

Director - Distributed Computing Services, University

Computing Services 1987-88

Director - Information Resources, School of Business 1988-2002

University Academic Computing Advisory Board 1989-

### UNIVERSITY SERVICE (Continued)

School of Business MBA Admissions Committee 1992-97

School of Business MBA Curriculum Design Team 1993-95

Chief Information Officer, School of Business 1993-99

Technology Advisor to the Office of the Dean 2000-2002

Committee on Undergraduate Instruction 2001

Judge – University Undergraduate Research Competition 2001-2004

Marshall School of Business Graduate Instruction Committee 2004-

Marshall School of Business Executive Director Center for Global Logistics & Supply Chain

### HONORS AND AWARDS

Finalist for University Teaching Award, University of Southern California 1978

Department Nominee for University Teaching Award 1977 and 1978

Commerce Associates Research Awards 1974, 1975, 1976

Elected to the following honorary societies:

- Tau Beta Pi (Engineering National Honorary)
- Pi Tau Sigma (Mechanical Engineering National Honorary)
- Master's Thesis won 1968 National Graduate Research Award (3rd place), American Institute of Industrial Engineers
- New York States Regents Scholar

#### PROFESSIONAL ACTIVITIES

Operations Research Society of America (Full member)

- Transportation Science Section, Member of the Council 1973-1976
- Student Affairs Committee 1975-1977
- Student Paper Competition Judging Board 1975, 1976
- Special Subcommittee on National Student Honorary
- Session Chairman, numerous national meetings
- Invited member, long-range planning subcommittee of ORSA Council 1976

# The Institute of Management Sciences

- College on the Practice of Management Science Member of the Council 1977
  Special Session Coordinator 1976-1978
- Invited to attend special CPMS Conference on implementation and professional practice 1976
- Invited to attend Conference Board seminar on management science in business 1976
- Invited onto special TIMS panel on education of management science professional practitioners 1977

Western Finance Association

Referee for Management Science, Operations Research, Networks, Interfaces

Consultant to Southern California Edison Co., Garrett Corp., The RAND Corp., INTERACTIVE Systems Corp., Bechtel Corp., D.P. Welles, Inc., Bijan, Inc., Pacific Triangle Management, First Interstate Bancorp, RWR Development, The Boston Company, A&E Specialities