



DARKO SKORIN-KAPOV, Ph.D.
Professor

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SUMMARY

Extensive international academic and industrial experience. Research, teaching and mentoring in business decision modeling related to information technologies. Teaching interest is in the areas of Management Information Systems, Operations Management and Management Science. Interdisciplinary research efforts embracing management science, information systems and economics. Main research interest is on various aspects of network design, focusing on two topics: optimization and cost allocation in telecommunication, transportation and financial networks.

EDUCATION

Ph.D., Management Science/Management Information Systems, Sauder School of Business, University of British Columbia, Vancouver B.C., Canada, 1989.
M.Sc., Information Science, University of Zagreb, Croatia, 1983.
B.Sc., Mathematics, University of Zagreb, Croatia, 1978.

PROFESSIONAL EXPERIENCE

Adelphi University, Garden City, NY, USA **2023-present**
Robert B. Willumstad School of Business
Professor and Chair Department of Decision Sciences and Marketing

Adelphi University, Garden City, NY, USA **2003-2023**
Robert B. Willumstad School of Business
Professor of Information Technology and Operations Management (tenured)
 - Teaching and research in the areas related to information technology and operations management.

Adelphi University, Garden City, NY, USA **1999-2003**
Robert B. Willumstad School of Business
Associate Professor Information Technology and Operations Management
 - Teaching and research in the areas related to information technology and operations management.

State University of New York at Stony Brook, USA **1996-2003**
W.A. Harriman School for Management and Policy

Associate Professor of MIS/Management Science (tenured, on leave from 1997-2003).

- Research and teaching in the area of Management Science.

Financial Technologies International, New York, NY, USA

1997-1999

Financial Model Engineer

Research and Development of the Global Financial Data Model (GFDM). Specifically:

- Research and development of an object oriented, real-time, automated management platform for proactive processing of financial business events.
- Developed demo study showing that Global Financial Data Model can efficiently consolidate information across various information systems to support valuation/exposure/risk technology applications.
- Designed system for providing single source of consolidated information for fixed income securities.
- Developed methodology and software design for valuation of some exotic financial derivatives, which is in compliance with securities industry standards.
- Strategic and tactical analysis of potential opportunities for data model vendors in risk management applications.

University of Zagreb, Zagreb, Croatia

1996-1997

Faculty of Economics and Mathematics

Visiting Associate Professor, Fulbright Scholar.

- Combining practice and information management education via case study approach.
- Involved in a project for the development of the information infrastructure of the Istria County.
- Taught management science course in undergraduate economics program and combinatorial optimization in mathematics doctoral program.

University of Tilburg, Tilburg, The Netherlands

February 1997

Center for Economic Research (CentER)

Visiting Fellow

- Research in the area of cost/revenue allocation.

State University of New York at Stony Brook, USA

1989-1995

W.A. Harriman School for Management and Policy

Assistant Professor of MIS/Management Science

- Research in the area of telecommunication network optimization and cost allocation.
- Designed and taught courses in diverse areas (management information systems, operations management, and management science) in different programs (masters, undergraduate and executive) with consistently excellent student evaluations.
- Advisor for numerous information systems internship and group projects with industry.
- Organized research seminar series in decision sciences.

Stony Brook University Medical Center, Stony Brook, NY, USA

1995-1996

Radiology

Leading a team in an interdisciplinary telecommunications project involving Stony Brook University Medical Center, the Veterans Affairs Medical Center in Northport, Long Island, and NYNEX. Developed a cost/benefit analysis for building a telemedical telecommunication network, which will serve Long Island health industry.

State University of New York at Stony Brook, USA **1989-1995**
Department of Applied Mathematics and Statistics
Adjunct Assistant Professor

- Advisor for two doctoral theses.
- Taught operations research courses in doctoral program.

University of British Columbia, Vancouver B.C., Canada **1984-1988**
Faculty of Commerce and Business Administration
Research Assistant, Teaching Assistant

- Research in communication network design and optimization.

Hydrometeorological Institute, Zagreb, Croatia **1981-1984**
Hydrology Research Center
Project Development Leader

- Development of the conceptual hydrological model of direct run-off for the urban streams of Medvednica and development of accompanying software.
- Developed the software package for Digitalization of Lymnigraphs and Thermographs (DIGI), basis of a Hydrological Information System HIS.
- Program package for Computing Watershed Characteristics from Topological Maps (HYPSO).

Zagreb Bank, Zagreb, Croatia **1978-1980**
Computing Center
Software Analyst

- Developed the program package for long-term loans.

TEACHING EXPERIENCE

Taught courses on different levels including: undergraduate programs in business and economics; MBA programs and executive MBA programs in business; M.Sc. programs in economics and applied mathematics; Ph.D. programs in management science, operations research and applied mathematics. Classes were ranging in size from 5 to 120 students. According to student teaching evaluations, in all cases consistently ranked among the best few in the respective departments.

Graduate courses: Business Modeling
Combinatorial Optimization
Computer Applications
Database Management
Linear Programming
Management of Technology

Mathematics for Managers
Operations Management
Systems Analysis and Design
Statistical Methods

Technology Management Executive Program: Information Systems Seminar

Undergraduate courses: Decision Analysis, Probability and Statistics.
Database Management
Information Technology and Applications
Management Science
Systems Analysis and Design

FELLOWSHIPS, GRANTS AND AWARDS

- **Bender Research Award** (best paper) 2018.
- **Professor Recognition Award**, Adelphi University 2013.
- **Bender Research Fellowship Award** (3 Year Body of Work), 2013-2016.
- **Bender Research Award** (best paper) 2012.
- **Excellence in Faculty Scholarship and Creative Work Award**, Adelphi University 2008-2009.
- **Bender Research Fellowship Award** (3-Year Body of Work), 2006-2009.
- **Croatian Ministry of Science and Technology**, research project # 0145011 entitled "On the Design of Optical Telecommunication Networks", consultant/co-investigator, 2003-2006.
- **Presidents Faculty Development Award**, Adelphi University, 2001-2002.
- **Presidents Faculty Development Award**, Adelphi University, 2000-2001.
- **Presidents Faculty Development Award**, Adelphi University, 1999-2000.
- **National Science Foundation Grant**, (Decision, Risk and Management Science/ Production Systems and Operations Research/NSFNET), Principal Investigator, 1996-1997.
- **Fulbright Scholar Award** (lecturing/research under the program with Croatia), 1996-1997.
- **Fellowship for a research visit** to Center for Economic Research (CentER), Tilburg University, The Netherlands, 1997.

- **Croatian Ministry of Science and Technology** (Consultant on the project: Models and Methods in Operations Research), consultant, 1997-2005.
- **Croatian Ministry of Science and Technology** (Consultant on the project: Development of the Istrian regional information system), consultant, 1997-2003.
- **Industrial support for Telecommunication Telemedicine Project** involving University Medical Center at Stony Brook, the Veterans Affairs Medical Center in Northport, Long Island, and NYNEX, 1996.
- **Travel Award** for research visit to ALIO/EURO workshop on practical combinatorial optimization, Catholic University, Valparaiso, Chile, 1996.
- **National Science Foundation Grant**, (Mathematics/Geography), Principal Investigator, 1992-1995.
- **Stony Brook PDQWL Term Faculty Development Award** (NY State UUP), 1993.
- **Term Faculty Development Award** (NY State UUP), 1992.
- **New Faculty Development Award** (NY State UUP), 1991.
- SUNY Non-tenured Faculty **Travel Grant**, 1989.
- University of British Columbia **Summer Graduate Fellowship**, 1988.
- University of British Columbia **Student Travel Grant**, 1988.
- Leslie G.J. Wong **Memorial Fellowship**, 1986-1987.
- Dean Early D. MacPhee **Memorial Fellowship in Commerce and Business Administration**, 1984-1985.

WORK IN PROGRESS

- Nucleolus of the Network Connectivity Game.

PUBLICATIONS

Book and book chapters:

1. Jadranka Skorin-Kapov and Darko Skorin-Kapov, [*Balada o nenadležnosti*](#), **Izvori-Sveučilišna knjižara** (in Croatian, eng. transl. *A Ballad about nonjurisdiction*), ISBN: 978-953-7015-58-9, 312 pages, October 2021.
2. J. Skorin-Kapov and D. Skorin-Kapov, Optical Networks: Trends, Issues and Management, a chapter in *Handbook of Research on Telecommunications Planning and Management for Business*, In Lee (editor), pp. 941-956, Advances in E-Business Research (AEER) Book Series, ISBN: 978-1-60566-194-0; ©2009 **Information Science Reference** (formerly Idea Group Reference IGI Global).
3. D. Skorin-Kapov, J. Skorin-Kapov and V. Boljuncic, Network Location Problems in Telecommunications, a chapter in *Handbook of Optimization in Telecommunications*, P.M. Pardalos and M.G.C. Resende (eds.), pp. 517- 544, ISBN 0-38-730662-5, ©2006 **Springer Science + Business Media**.
4. D. Skorin-Kapov, On Cost Allocation in Steiner Tree Networks, a chapter in STEINER TREES IN INDUSTRIES, D. -Z. Du and X. Cheng (Eds.), *Combinatorial Optimization* Vol. 11, pp. 353-375, ISBN 1-4020-0099-5, ©2001 **Kluwer Academics Publishers**.

REFEREED JOURNAL ARTICLES

1. J. Skorin-Kapov and D. Skorin-Kapov, “[Business Competition and Innovation: Business and Ethical Issues in Engineering Discussed via Narrative Films](#)”, *International Journal of Business and Management Studies*, ISSN 2694-1430 (Print), 2694-1449 (Online), Volume 04; Issue no 08: (2023), pp 19-26.
2. J. Skorin-Kapov and D. Skorin-Kapov, “[On Cultural History Regarding the Intertwining Nature of Philosophy and Science: Bosovich and Nietzsche](#)”, *International Journal of History and Cultural Studies (IJHCS)*, Volume 9, Issue 2, ISSN 2454-7646 (Print) & ISSN 2454-7654 (Online), (2023), pp 50-54.
3. D. Skorin-Kapov and J. Skorin-Kapov, “[Network Connectivity Game](#),” *Journal of Computing and Information Technology*, Vol.28, No.2, (2020), pp 73-87 (Note: due to Covid backlog it was retroactively published in 2020, although it was actually accepted in Summer 2021 and published in Fall 2021).

4. D. Skorin-Kapov, "[Social Enterprise Tree Network Game](#)", *Annals of Operations Research*, Volume 268, Issue 1–2, (2018), pp 5–20.
5. D. Skorin-Kapov, "The Monotonic Cost Allocation Rule in Steiner Tree Network Games", *Journal of Computing and Information Technology*, Vol. 24, No1., (2016), 17-29.
6. D. Skorin-Kapov, "Some Notes on Cost Allocation in Multicasting", *Croatian Operational Research Review (CRORR)*, Vol. 3, (2013), 2-14.
7. D. Skorin-Kapov, J. Skorin-Kapov, "A Note on Steiner Tree Games", *Networks*, Volume 59, Issue 2, (2012), 215-225.
8. J. Skorin-Kapov, D. Skorin-Kapov and H. Podnar, "Core Node Location Problem: Heuristic Solvability via Tabu Search", *International Journal of Operations and Quantitative Management*, Volume 18, Number 1, (2012), 71-86.
9. D. Skorin-Kapov and J. Skorin-Kapov, "A Note on Steiner Tree Games", *Networks-2011-DOI 10.1002/net*, p 1-11, published in Wiley Online Library ©2011 Wiley Periodical, Inc. (Prior to appearing in issue of *Networks* (journal hard copy)).
10. J. Skorin-Kapov, D. Skorin-Kapov, "MILP Formulations and Quantitative Analysis for the Core Node Location Problem", *International Journal of Operations and Quantitative Management*, Volume 14, Number 1, (2008), 17-27.
11. J. Skorin-Kapov, D. Skorin-Kapov and J. Boljuncic, "On Management of Optical Networks: Utilization versus Cost", *Journal of Applied Business and Economics*, Vol. 7 (2), (2007) 58-70.
12. D. Skorin-Kapov and J. Skorin-Kapov, Threshold Based Discounting Network: The Cost Allocation Provided by the Nucleolus, *European Journal of Operational Research*, Vol. 166, Issue 1, (2005), 154-159.
13. V. Boljuncic, D. Skorin-Kapov and J. Skorin-Kapov, A Tabu Search Approach Towards Congestion and Total Flow Minimization in Optical Networks, *Journal of Systems Science and Systems Engineering*, Vol. 13, No. 2, (2004), 180-201.
14. H. Podnar, J. Skorin-Kapov and D. Skorin-Kapov, Network Cost Optimization Using Threshold Based Discounting, *European Journal of Operational Research*, Vol. 137, Issue 2, (2002) 371-386.
15. D. Skorin-Kapov, Network Cost Allocation Games Based on Threshold Discounting, *Mathematical Communications*, Vol. 6 (2002) 1-14.

16. D. Skorin-Kapov, On Cost Allocation in Hub-Like Networks, *Annals of Operations Research*, 106, (2001) 63-78.
17. V. Boljuncic, D. Skorin-Kapov and J. Skorin-Kapov, On Delay versus Congestion in Designing Rearrangeable Multihop Lightwave Networks, *Journal of Computing and Information Technology*, Vol. 9, No. 3, (2001) 213-218.
18. D. Skorin-Kapov, On Cost Allocation in Networks with Threshold Based Discounting, *Journal of Computing and Information Technology*, Vol. 8, No. 4, (2000) 311-317.
19. D. Skorin-Kapov, Hub Network Games, *Networks* 31, (1998) 293-302.
20. D. Skorin-Kapov, On Some Cost Allocation Problems in Communication Networks, *Mathematical Communications* 3, (1998) 85-94.
21. D. Skorin-Kapov, J. Skorin-Kapov and M. O'Kelly, Tight Linear Programming Relaxations of Uncapacitated p-Hub Median Problems, *European Journal of Operational Research*, Vol. 94 (1996) 582-593.
22. M. O'Kelly, D. Bryan, D. Skorin-Kapov and J. Skorin-Kapov, "Hub network Design with Single and Multiple Allocation: A Computational Study of the Role of the Interhub Discount Factor," *Location Science* (incorporated into *Computers and Operations Research*), Vol. 4 (3), (1996) 125-138 .
23. D. Skorin-Kapov, On the Core of the Minimum Cost Steiner Tree Games, *Annals of Operations Research*, 57, (1995) 233-249.
24. M. O'Kelly, D. Skorin-Kapov and J. Skorin-Kapov, Lower Bounds for the Hub Location Problem, *Management Science*, Vol. 41, No. 4, (1995) 713-728.
25. D. Skorin-Kapov and J. Skorin-Kapov, On Hub Location Problems, *Journal of Computing and Information Technology*, Vol. 3, No. 3, (1995) 183-192.
26. D. Skorin-Kapov and H.F. Beltran, An Efficient Characterization of Cost Allocation Solutions Associated With Capacitated Network Design Problems, *Telecommunication Systems*, Vol., 3 No. 1, (1994) 91-107.
27. D. Granot and D. Skorin-Kapov, On Some Optimization Problems on k-Trees and Partial k-Trees, *Discrete Applied Mathematics*, Vol. 48, (1994) 129-145.
28. D. Skorin-Kapov and J. Skorin-Kapov, On Tabu Search for the Location of Interacting Hub Facilities, *European Journal of Operational Research*, Vol. 73, Issue 3, (1994) 501-508.

29. D. Skorin-Kapov and H.F. Beltran, On a Cost Allocation Problem Arising From a Star-Star Capacitated Concentrator Location Problem, *Journal of Computing and Information Technology*, Vol. 2, No. 1, (1994) 1-8.
30. H.F. Beltran and D. Skorin-Kapov, On Minimum Cost Isolated Failure Immune Networks, *Telecommunication Systems*, Vol. 3, No. 2 (1994) 183-200.
31. D. Skorin-Kapov, On a Cost Allocation Problem Arising From a Capacitated Concentrator Covering Problem, *Operations Research Letters*, Vol. 13, No. 5, (1993) 315-323.
32. D. Granot and D. Skorin-Kapov, NC Algorithms for the Recognition of Partial 2-Trees and Partial k-Trees, *SIAM Journal on Discrete Mathematics*, Vol. 4, No. 3, (1991) 342-354.

INDUSTRIAL TECHNICAL REPORTS

33. D. Skorin-Kapov, Real-time, Automated Management Platform for Financial Business Events, (Fulton/City Hall Technologies), Technical paper, *Financial Technologies International*, March 1999.
34. D. Skorin-Kapov, Valuation, Exposures, Value at Risk (VaR) for Fixed Income Securities: Consolidation of Market and Model Data, Technical paper, *Financial Technologies International*, November 1998.
35. D. Skorin-Kapov, Swap Data Model and Risk Management Analysis, Technical paper, *Financial Technologies International*, June 1998.
36. D. Skorin-Kapov, Enterprise-wide risk management systems: Industry Needs, Methods and Trends, Technical paper, *Financial Technologies International*, April 1998.
37. D. Skorin-Kapov, Methodology and Data Model for Computing Interest Bearing Fixed Income Securities, Technical paper, *Financial Technologies International*, February 1998.
38. D. Skorin-Kapov, Valuation of some Derivatives, Methodology and Computation, Technical paper, *Financial Technologies International*, December 1997.

ARTICLES IN REFEREED PROCEEDINGS

39. D. Skorin-Kapov and J. Skorin-Kapov, "On Cost Allocation in Some Communication Networks", Proceedings of the 23rd National Business and Economic Society Conference, Rio Grande, Puerto Rico, (March, 2023), 63-70.

40. D. Skorin-Kapov and J. Skorin-Kapov, "Some Notes on Cost Allocation in Multicasting", *International Conference of Telecommunication Systems Management ICTSM 2012*, Prague, Czech Republic, (May 2012), 154-159.
41. D. Skorin-Kapov, "On Primal-Dual Cost Allocation Schema in Multicast Communication: Combinatorial Game Theory Model," *Proceedings of The 17th International Conference on Industrial Engineering and Engineering Management* (IEEE Press), Xiamen, P.R. China (October, 2010), 433-438.
42. D. Skorin-Kapov and J. Skorin-Kapov, "A Cost Allocation Scheme for Multicasting", *Proceedings of the 2007 Networking and Electronic Commerce Research Conference* (NAEC 2007), Riva del Garda, Italy (October, 2007), 1-8.
43. J. Skorin-Kapov, D. Skorin-Kapov and J. Boljuncic, "On Management of Optical Networks: Utilization versus Cost", *Electronic Proceedings of the 7th National Business and Economic Society Conference*, NBES'2007, Puerto Rico (March 2007).
44. D. Skorin-Kapov and J. Skorin-Kapov, On the Nucleolus of the Threshold Based Discounting Network (TBDN) Game, *Proceedings of the 25th International Conference on Information Technology Interfaces*, ITI'2003, Cavtat, Croatia (2003), 525-530.
45. D. Skorin-Kapov and J. Skorin-Kapov, "On Economies of Scale and Cooperation in Threshold Based Discounting Networks", *Electronic Proceedings of the 4th National Business and Economic Society Conference*, NBES'2003, St. Thomas, US Virgin Island (2003).
46. V. Boljuncic, D. Skorin-Kapov and J. Skorin-Kapov, "Some Efficiency Issues in the Design of Optical Network, *Proceedings of the 3rd National Business and Economic Society Conference*, NBES'2002, Hawaii , USA(2002), 1-10.
47. V. Boljuncic, D. Skorin-Kapov and J. Skorin-Kapov, A Design of Rearrangeable Multihop Lightwave Networks: A Multicriteria Approach", *Proceedings of the 4th Metaheuristics International Conference* (MIC 2001), Porto, Portugal (2001), 23-29.
48. V. Boljuncic, D. Skorin-Kapov and J. Skorin-Kapov, On Delay versus Congestion in Designing Rearrangeable Multihop Lightwave Networks, *Proceedings of the 23rd International Conference on Information Technology Interfaces*, ITI'2001, Pula, Croatia (2001), 297-303.
49. D. Skorin-Kapov, Population Monotonic Cost Allocation Scheme for the Multicast Routing in Networks, *Extended Abstracts of The XIV Italian Meeting on Game Theory and Applications*, Ischia., Italy (2001).
50. D. Skorin-Kapov, H. Podnar, J. Skorin-Kapov, Cost Optimization of Networks with Threshold Based Discounting, *Proceedings of the INFORMS-KORMS, Seoul 2000*

- Conference, Information and Knowledge Management in the 21st Century*, Seoul, South Korea (2000), 453-459.
51. D. Skorin-Kapov, On Cost Allocation in Networks With Threshold Based Discounting, *Proceedings of the 22nd International Conference on Information Technology Interfaces*, ITI'2000, Pula, Croatia (2000) 409-414.
 52. K. Kent, D. Skorin-Kapov, Distance Monotonic Stable Cost Allocation Scheme for the Minimum Cost Spanning Tree Network, *Proceedings of the 19th International Conference "Information Technology Interfaces," ITI'97*, Pula, Croatia (1997) 463-468.
 53. D. Skorin-Kapov, On Some Cost Allocation Issues in Hub Networks, *Proceedings of the Broadband and Multimedia Workshop*, B&MW, Zagreb, Croatia (1996), 79-95.
 54. D. Skorin-Kapov, The Role of Economies of Scale in the Hub Networks Cost Allocation Problem, *Proceedings of II ALIO/EURO Workshop on Practical Combinatorial Optimization*, Valparaiso, Chile (1996) 73-89.
 55. K. Kent and D. Skorin-Kapov, "Population Monotonic Cost Allocation on MST's," *Proceedings of the 6th Conference on Operational Research*, KOI'96, CORS, Rovinj, Croatia (1996) 43-48.
 56. D. Skorin-Kapov and J. Skorin-Kapov, On Hub Location Models, *Proceedings of the 17th International Conference "Information Technology Interfaces," ITI'95*, Pula, Croatia (1995) 49-61.
 57. D. Skorin-Kapov, On Cost Allocation Problems in Telecommunication Networks, *Proceedings of the 4th Conference on Operational Research*, KOI'94, CORS, Rab, Croatia (1994) 10-22.
 58. H.F. Beltran and D. Skorin-Kapov, On Isolated Failure Immune Networks, *Proceedings of the 2nd International Conference on Telecommunication Systems, Modeling and Analysis*, Nashville TN, USA (1994) 444-453.
 59. D. Skorin-Kapov and H.F. Beltran, On Unifying Efficient Characterization of Cost Allocation Solutions Associated With CND Problems, *Proceedings of the 2nd International Conference on Telecommunication Systems, Modeling and Analysis*, Nashville TN, USA (1994) 397-407.
 60. D. Skorin-Kapov, On the Core of the Minimum Cost Steiner Tree Games, *Proceedings of the Symposium on Applied Mathematical Programming and Modeling APMOD'93*, Budapest, Hungary (1993) 529-536.
 61. D. Skorin-Kapov, A Fixed Cost Spanning Forest Problem on Series-Parallel Graphs, *Proceedings of the 2nd Conference on Operational Research*, KOI'92, CORS, Rovinj, Croatia (1992) 85-94.

62. D. Skorin-Kapov, The Model for Reduction of Rain, *JDH, Yugoslav Hydrological Society*, Split, Croatia (1984) 73-84.
63. D. Skorin-Kapov and V. Buselic, Hypso Package for Computing Watershed Characteristics From Topological Maps, *Proceedings of the 6th International Symposium, "Computer at the University,"* Cavtat, Croatia (1984) 284-293.
64. D. Skorin-Kapov, Program Package for Digitalization of Lymnigraphs and Thermographs as Groundwork for Hydrological Data Base, *Proceedings of the 7th Symposium of Informatics, Jahorina, Bosnia and Hercegovina* (1983) 157-163.
65. D. Skorin-Kapov, The Model and the Program for Average Rain Around its Center, *Proceedings of the 7th Symposium of Informatics, Jahorina, Bosnia and Hercegovina* (1983) 223-234.
66. D. Skorin-Kapov, The Digital Model and the Program for Determining the Time of Concentration and the Isochrones of Watersheds, *Proceedings of the 5th International Symposium, "Computer at the University,"* Cavtat, Croatia (1983) 89-101.

SUPERVISION OF Ph.D. DISSERTATIONS

- Hector Fernando Beltran, "On Some Design and Cost Allocation Problems in Telecommunication Networks," completed in July 1994.
- Kathryn Kent, "Monotonic Cost Allocation Schemes Arising in the Design of Telecommunication Networks," completed in May 1997.
- Served on a number of Ph.D. thesis committees in the area of operations research at State University of New York at Stony Brook, USA, at University of Zagreb, Croatia and Anna University Chennai, India.

SUPERVISION OF INTERNSHIPS AND GROUP PROJECTS

- Supervision of several internship reports every year in the period 1989-95. (The internship report is a major written report required for Harriman graduates and it is comparable to a master thesis). Projects were in the area of management information systems. Examples include: development of an information system for a certain bank in India, business data flow for a manufacturing company in Taiwan, tele networking in Croatia, data base for a Long Island Water Authority etc.
- Supervision of one group project per year (1989-95) performed by a group of Harriman students for an outside client (typically a business or an organization in Long Island community, which is in need of information system improvement). Examples include: Symbols, LIRR, LILCO etc.

UNIVERSITY AND DEPARTMENTAL SERVICE

- Faculty Committee on Retention Tenure and Promotion (FCRTP) (2020- present)
- Chair of the School of Business Unit Peer Review Committee (2004- 2018, with the exception of Fall 2007 and Spring 2015 when I was on sabbatical).
- Chair Committee for Bender Award in scholarship (body of work) (2008-2011, 2016, 2017)
- School of Business Cabinet (2012).
- Member Committee for Bender Award in scholarship (body of work) (2012).
- Health Information Technology Task Force (2009-2012).
- Scholarship & Creative Activity Awards Criteria Committee (2005- 2011).
- Faculty Committee on Retention Tenure and Promotion (FCRTP) (2003- 2004).
- Chair of the School of Business Curriculum Committee (2000 - 2003).
- Member of the Senate Committee on Academic Standards (2000-2003).
- Member of the Senate Sub-Committee for Academic Information Technologies (SCAIT) (1999-2005).
- Participation in the development of the curriculum for the undergraduate program (specialization in computer information systems (CIS)) (1999-present).
- Initiated and served as an advisor of "The Harriman Business Society". Activities included guest lectures, newsletter, field trips, maintenance of a graduate school information file, maintenance of an undergraduate resume file, internship announcements, faculty and student socials, 1992-1996.
- Success of The Harriman Business Club (whose activities were restricted to Harriman students) prompted my initiation for recently founded "The Stony Brook Business Club". The objective of this organization is to promote an awareness of business opportunities to entrepreneurial students, and to provide interested students with a resource center of business books, journals, tapes, 1993-1996.
- Member of the College of Engineering and Applied Sciences Committee on Academic Standing Appeals, 1995-1996.
- Freshman advising initiative, 1993-1996.

- Graduate Curriculum Development Committee, 1993-1996.
- Committee for the development of a Ph.D. program in Management, 1993-1996.
- Chair, Committee for the development of Telecommunications Certificate Program, 1992-1993.
- Member, Committee for the development of Information System Management Certificate 1992-1993.
- Participation in the Recruiting Committee (Information Systems, Production Management) 1992-1993.
- Organization of Decision sciences Research Seminar Series (joint venture by the Harriman School for Management and the Department of Applied Mathematics), 1991-1992.
- Member of the committee for the undergraduate curriculum design, 1992-1996.
- Participation in the Recruiting Committee (Management Science) in the Department of Applied Mathematics and Statistics, 1990-1991.
- Member, faculty evaluation committee, 1990-1991.
- Designing graduate course in Data Base Management, 1989-1990.
- Recruitment of graduate students (in particular international students in doctoral program in the Department of AMS), 1989-1996.

OTHER PROFESSIONAL ACTIVITIES

(editorial activities, conference organizations, key-note presentations, other invited presentations)

EDITORIAL ACTIVITIES

- **Associate Editor** of *Electronic Commerce Research*.
- **Associate Editor** of *Telecommunication Systems*.
- **Associate Editor** of *Journal of Computing and Information Technology*.
- **Editor**, Special Issue on Combinatorial Optimization of *Algorithmic Operations Research*.

- **Member of the Editorial Review Board** of *Mathematical Communications*.
- **Member of the Editorial Review Board** of *Croatian Operational Research Review*.
- **Member of the Editorial Review Board** of *International Journal of Operations and Quantitative Management*.
- **Member of the Editorial Review Board** of *Journal of Modeling in Management*

CONFERENCE ORGANIZATIONS

- Member, Program Committee for The Annual International Conference on Operational Research KOI; 2014 and 2016, Organized by CORS (Croatian Operation Research Society), October 2014 and October 2016, Osijek Croatia,.KOI 2018 Zadar Croatia, KOI 2020, September 2020, Šibenik Croatia.
- Member, Program Committee for The Annual International Conference "Information Technology Interfaces," ITI' , organized by the University of Zagreb Computing Center under the auspices of Croatian Academy of Science and Arts, Cavtat, June 2012, June 2013, June 2014, June 2015, June 2016, June 2017, June 2018, June 2019.
- Member, Program Committee for The Annual International Conference on Operational Research KOI; Organized by CORS, (September 2012), Trogir, Croatia.
- Member, Guest Academic Committee for the 17th IEEE International Conference on Industrial Engineering and Engineering Management, October 29-31, Xiamen, China.
- Member, Scientific Program Committee for the 2010 Networking and Electronic Commerce Research Conference, October, Riva del Garda, Italy, October, 2010
- Member, Program Committee for The Annual International Conference on Operational Research KOI; 2010, Organized by CORS (Croatian Operation Research Society), October 2010, Split, Croatia.
- Member, Program Committee for The Annual International Conference "Information Technology Interfaces," ITI' , organized by the University of Zagreb Computing Center under the auspices of Croatian Academy of Science and Arts, Cavtat, June 2010.
- Member, Scientific Program Committee for the 2008 Networking and Electronic Commerce Research Conference, October, Riva del Garda, Italy, October, 2008.
- Member, Scientific Program Committee for the XXI meeting of the European Chapter on Combinatorial Optimization., Dubrovnik, Croatia, May 2008.

- Member, Program Committee for The 2007 Networking and Electronic Commerce Research Conference, October, Riva del Garda, Italy, October 18-21, 2007.
- Member, Program Committee for The 8th International Conference on Electronic Commerce Research, at GAMMARTH, Tunis, Tunisia, June 9-12, 2005.
- Member, Program Committee for The Annual International Conference on Operational Research KOI; Sponsored by CORS (1995 –2009) held in various places around Croatia and Slovenia..
- Member, Program Committee for The Annual International Conference "Information Technology Interfaces," ITI' , organized by the University of Zagreb Computing Center under the auspices of Croatian Academy of Science and Arts the 16th-30th, ITI Conference, some held in Pula some in Cavtat, annually from June 1994-June 2013).

KEY-NOTE PRESENTATIONS

- Plenary Speaker, On Cost Allocation in Multicasting, The 14th International Conference on Operational Research KOI 2012, Trogir, Croatia, September 2012.
- Plenary Speaker, On Cost Allocation in Communication Networks: Algorithmic Game Theory Approach, The IEEE 17th International Conference on Industrial Engineering and Engineering Management, Xiamen, P.R. China, October 2010.
- Plenary speaker, On Cost Allocation Schemes in Networks: Cooperative Game Theory and Combinatorial Models, ECCO XXI- 2008, 21th Conference of the European Chapter on Combinatorial Optimization, Dubrovnik, Croatia, May 2008.
- Plenary speaker, On Hub Location Problems, the 2nd Croatian Congress of Mathematics, Zagreb, Croatia, June 2000.
- Plenary speaker, On the design of Hub Networks, The ALIO/EURO, the 2nd Workshop on Practical Combinatorial Optimization, Valparaiso, Chile, November 1996.
- Plenary speaker, On Cost allocation in Hub Networks, The 17th Annual International Conference "Information Technology Interfaces, "ITI'95, Pula, Croatia, June 1995.
- Plenary speaker at the 2nd Workshop on "Optimal Design of Telecommunication Networks," ORSA/TIMS Workshop on Telecommunication Systems, Iowa City, IO, USA, October 1994.
- Plenary speaker, On Cost allocation in Steiner Tree Networks, The 6th Annual International Conference on Operational Research KOI'94; Rab, Croatia, October 1994.

OTHER INVITED PRESENTATIONS

- Invited speaker, On Cooperative Network Games, Research Seminar in Optimization and Game Theory, Faculty of Economics, University of Zagreb, Croatia, October 29, 2007.
- Invited speaker, Cost Allocation in Communication Networks, Algorithmic Game Theory Approach, Optimization Seminar, Advanced Optimization Laboratory, McMaster University, Hamilton, Canada, February 9, 2004.
- Invited speaker, Research Seminar in the Department of Computing and Intelligent Systems, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, January 16, 2003.
- Invited speaker, Hub Network Games, Game theory seminar series, Tilburg University, The Netherlands, February 1997.
- Invited speaker at the Broadband and Multimedia Workshop (B&MW), Zagreb, Croatia, November 1996.
- Organized and chaired the invited session "Design of Communication Networks," (Cluster: Heuristic Programming), INFORMS, New Orleans, USA, November 1995.
- Organized and chaired the sessions sponsored by TIMS College on Location Analysis, "Hub Location," ORSA/TIMS, Detroit, USA, October 1994.
- Organized and chaired the invited session "Modeling, Simulation and Optimization," ITI'95, Pula, Croatia, June 1995.
- Organized and chaired the invited session on "Integer Programming," and the session on "Networks and Graphs," KOI'94, Rab, Croatia, October 1995.

Note: All invited and plenary talks were partially financially supported by respective organizers.

OTHER PRESENTATIONS AT CONFERENCES

- "On Cost Allocation of Steiner Trees in Communication Networks", (with D. Skorin-Kapov), *24th National Business and Economic Society Conference*, Puerto Vallarta, Mexico. March 6-9, 2024.
- "On Cost Allocation in Some Communication Networks" (with J. Skorin-Kapov), National Business and Economic Society, 23rd Annual Conference, Rio Grande Puerto Rico, March 8-11, 2023.

- “The Nucleolus of the Network Connectivity Game” (with J. Skorin-Kapov), European Chapter for Combinatorial Optimization ECCO XXXV-CO 2022, Madrid, Spain (done on-line), June 9-11, 2022.
- “Avoiding jurisdiction: Local government versus state bodies”, (with J. Skorin-Kapov), *International Congress on Social Sciences, China to Adriatic-XIV*, Kayseri, Turkey, (done on-line) June 10-12, 2022.
- “Network Connectivity Game”, Part 2, INFORMS Annual Meeting, Anaheim, California, USA and online, October 24-27, 2021.
- “Network Connectivity Game”, Part 1, The 34th Conference of the European Chapter on Combinatorial Optimization (ECCO 2021) organized by the DSLAB Research Group of the Universidad Rey Juan Carlos (Madrid, Spain), on-line on June 10–11, 2021.
- “Social Enterprise Tree Network Game“, ECCO XXXII Conference of the European Chapter on Combinatorial Optimization, St. Julian's, Malta, May 30-June 1, 2019.
- “The Social Tree Network Game”, The 17th *National Business and Economic Society Conference*, NBES’2017, Puerto Vallarta, Mexico, March 7-11, 2017.
- “On Monotonicity in Steiner Tree Games”, European Chapter for Combinatorial Optimization, ECCO XXVII Conference, Catania, Italy, May 28-30, 2015
- “Distance and Population Monotonic Cost Allocation Scheme for the Steiner Tree Game in Series-Parallel Communication Networks”, *The 15th National Business and Economic Society Conference*, NBES’2014, Hawaii (Big Island), USA, March, 2014.
- “A Meta Heuristic Approach for Minimizing the Maximum Link Distance for the Core Node Location Problem (CNLP)”, *The 14th International Conference on Operational Research KOI 2012*, Trogir, Croatia, September 2012.
- “Some Notes on Cost Allocation in Multicasting”, *International Conference of Telecommunication Systems Management ICTSM 2012*, Prague, Czech Republic, May 24-26, 2012.
- “Tabu Search Heuristic for the Core Node Location Problem (CNLP)”, INFORMS Annual Meeting, San Diego, California, USA, October 11-14, 2009.
- “MILP Formulations and Quantitative Analysis for the Core Node Location Problem”, *The 10th National Business and Economic Society Conference*, NBES’2009, St. Kitts, British West Indies, (March 11-14, 2009).

- “On Multicast Routing Games in Networks and Population Monotonic Allocation Schemes, 2007 Networking and Electronic Commerce Research Conference (NAEC 2007), Riva del Garda, Italy, (October 18-21, 2007).
- “The Cost Allocation for Multicasting in Communication Networks”, ECCO XX- 2007, 20th Conference of the European Chapter on Combinatorial Optimization, Limassol, Cyprus, (May 24-26, 2007).
- “On Management of Optical Networks: Utilization versus Cost”. *The 6th National Business and Economic Society Conference*, NBES’2007, Puerto Rico (March, 2007).
- On Cost Allocation for Multicasting, The 6th Annual Conference of National Business and Economic Society, Los Cabos, Mexico, March 7-11, 2006.
- “Application of Tabu Search in Design of Optical Networks”, The Third Croatian Congress of Mathematics, Split, Croatia, June 16-18, 2004.
- “Fair Cost Allocation Scheme in Threshold Based Discounting Networks”, Research Optimization Seminar, McMaster University, Hamilton, Canada, February 9 2004.
- “On Cost Allocation in Hub-like Networks”, EURO/INFORMS Joint International Meeting, Istanbul, Turkey, July 6-10, 2003
- “On the Nucleolus of the Threshold Based Discounting (TBDN) Game”, The 25th International Conference on Information Technology Interfaces, ITI’2003, Cavtat, Croatia, June 16-19, 2003.
- “On Applications of Game Theory in Communications”, Research Seminar in the Department of Computing and Intelligent Systems, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, January 16, 2003.
- “On Economies of Scale and Cooperation in Communication Networks With Threshold Based Discounting”, National Business and Economic Society Conference, St. Thomas, US Virgin Islands, March 5-8, 2003.
- “On Cost Allocation in Communication Networks”, The 16th triennial conference of the International Federation of Operational Research Societies, Edinburgh, UK, July 8-12, 2002.
- “On Economies of Scale and Cooperation in Some Communication Networks”, Fifth Spanish Meeting on Game Theory and European Voting Games, Seville, Spain, July 1-3, 2002.
- “Some Efficiency Issues in Designing Optical Networks”, The National Business and Economic Society, March 6-9, 2002, Maui, Hawaii, USA.

- A Multicriteria Approach Applied to Rearrangeable Multihop Lightwave Networks, INFORMS 2001 Annual Meeting, Miami Beach, Florida, USA, November 4-7, 2001.
- A Design of Rearrangeable Multihop Lightwave Networks: A Multicriteria Approach, The 4th Metaheuristics International Conference (MIC 2001), Porto, Portugal, July 15-20, 2001.
- Population Monotonic Cost Allocation Scheme for the Multicast Routing in Networks, The XIV Italian Meeting on Game Theory and Applications, Ischia, Italy, July 11-14, 2001.
- On Delay versus Congestion in Designing Rearrangeable Multihop Lightwave Networks, The 23rd International Conference on Information Technology Interfaces, ITI'2001, Pula, Croatia, June 19-22, 2001.
- On Cost Allocation in Networks With Threshold Based Discounting, INFORMS, San Antonio, Texas, USA, November 5-8, 2000.
- Cost Optimization of Networks with Threshold Based Discounting, INFORMS-KORMS, Seoul, South Korea, June 18-21, 2000.
- On Hub Network Models, 2nd Croatian Congress of Mathematics, Zagreb Croatia, June 15-17, 2000.
- On Cost Allocation in Networks with Threshold Based Discounting, 22nd International Conference on Information Technology Interfaces, ITI'2000, Pula, Croatia, June 13-16, 2000.
- Cost Allocation in Hub-Like Networks, INFORMS, Salt Lake City, Utah, USA, May 6-9, 2000.
- Distance Monotonic Stable Cost Allocation Scheme for the Minimum Cost Spanning Tree Network, The 19th International Conference "Information Technology Interfaces," ITI'97, Pula, Croatia, June 17-20, 1997.
- On Cost Allocation Issues in Telecommunication Networks, Colloquium Facultet der Economische Wetenschappen, Sponsored by Center for Economics Research, Katholieke Universiteit Brabant, Tilburg, The Netherlands, February 12, 1997.
- Survey of Optimization and Cost Allocation Problems in Communication Networks, Colloquium organized by Faculty of Electrical Engineering and Faculty of Economics, University of Osijek, Croatia, January 10, 1997.
- On Some Optimization Problems in Hub Networks, Part I, and On Some Cost Allocation Problems in Hub Networks, Part II, Seminars organized by Croatian Telecommunication Society and Croatian Section of IEEE, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, December 12, 1996.

- Some Cost Allocation Solutions in Hub Networks, ALIO/EURO 2nd Workshop on Practical Combinatorial Optimization, Valparaiso, Chile, November 11-15, 1996.
- Some Solutions to Network Problems in Communication Networks, Croatian Seminar Series Organized by Operational Research Society, Faculty of Economics, Zagreb University, Zagreb, Croatia, November 20, 1996.
- Cost Allocations on MST's, INFORMS, Atlanta, Georgia, USA, November 3-6, 1996.
- On Hub Networks, Broadband & Multimedia Workshop, (B&MW), Zagreb, Croatia, November 1996.
- Survey on Steiner Tree Problems, Annual Conference in Operations Research, KOI'96, CORS, Rovinj, Croatia, October 1-3, 1996.
- Population Monotonic Cost Allocations on MST's, 6th International Conference on Operational Research KOI; Sponsored by CORS; Rab, Croatia, October 1995
- Cost Allocation in Hub Networks: The Role of Economies of Scale, INFORMS, New Orleans, Louisiana, USA, October 29 - November 1, 1995.
- Hub Network Design with Single and Multiple Allocation: A Computational Study of the Role of the Interhub Discount Factor, INFORMS, New Orleans, Louisiana, USA, October 29 - November 1, 1995.
- On Hub Location Models, 17th International Conference "Information Technology Interfaces," ITI'95, Pula, Croatia, June 6-9, 1995.
- The Cost Allocation Problem Associated With the Hub Location Problem, ORSA/TIMS, Detroit, MI, USA, October 23-26, 1994.
- On Minimum Cost Isolated Failure Immune Networks, ORSA/TIMS, Detroit, MI, USA, October 23-26, 1994.
- Tight Linear Programming Relaxations for p-Hub Median Problems, Workshop on the Design of Telecommunication Networks, Iowa City, IA, USA, October 21, 1994.
- On The Cost Allocation Problem Associated With Some Network Design Problems, The 4th Conference on Operational Research, KOI'94, CORS, Rab, Croatia, October 4-6, 1994.
- On the Core of the Minimum Cost Steiner Tree Game in Networks, The Fifth Stony Brook Summer Institute in Game Theory, International Conference in Game Theory, Stony Brook, NY, USA, July 12-29, 1994.

- On the Interplay Between Heuristic and Exact Solutions for the Hub Location Problem, TIMS XXXII Anchorage, Alaska, USA, June 12-15, 1994.
- A Unifying Efficient Characterization of Some Cost Allocation Solutions Associated With Capacitated Network Design Problems, TIMS XXXII, Anchorage, Alaska, USA, June 12-15, 1994.
- On Mixed Integer Formulations for the Hub Location Problem, TIMS/ORSA, Joint National Meeting, Boston, MA, USA, April 1994.
- On Isolated Failure Immune Networks, The 2nd International Conference on Telecommunication Systems, Modeling and Analysis, Nashville, TN, USA (March 1994).
- On Unifying Efficient Characterization of Cost Allocation Solutions Associated With CND Problems, The 2nd International Conference on Telecommunication Systems, Modeling and Analysis, Nashville, TN, USA (March 1994).
- Lower Bounds on the Hub Location Problems, Invited Session, TIMS/ORSA Joint National Meeting, Phoenix, Arizona, USA, November 1993.
- On the Cost Allocation Problems in Telecommunication Networks, International Conference in Game Theory, Stony Brook, New York, USA, July 1993.
- On the Gap Between Upper and Lower Bound for the Hub Location Problem, DIMACS Workshop on Quadratic Assignments and Related Problems, Rutgers University, Newark, New Jersey, USA, May 1993.
- On a Cost Allocation Problem Arising From a Capacitated Concentrator Location Problem, Croatian Mathematical Society, Zagreb, Croatia, January 1993.
- On the Core of the Steiner Tree Game, Symposium on Applied Mathematical Programming and Modeling APMOD'93, Budapest, Hungary, January 1993.
- On The Core of the Fixed Cost Spanning Network Game, TIMS/ORSA Joint National Meeting, San Francisco, California, USA, November 1992.
- On Tabu Search for the Location of Interacting Hub Facilities, Invited Session, TIMS/ORSA Joint National Meeting, Orlando, Florida, USA, April 1992.
- Cost Allocation Associated With the Capacitated Concentrator Location Problem, TIMS XXX-SOBRAPO XXII Joint International Meeting, Rio de Janeiro, Brazil, July 1991.
- Parallel Algorithms for the Recognition of Partial 2-trees and Partial 3-trees, IFORS conference, Athens, Greece, July 1990.

- NC-algorithms for the Recognition of Partial k-trees, ORSA/TIMS Joint National Meeting, Las Vegas, Nevada, USA, May 1990.
- On Some Optimization Problems on k-trees and Partial k-trees, ORSA/TIMS Joint National Meeting, Denver, Colorado, USA, October 1989.
- Fixed Cost Spanning Forest Problem on Series Parallel Graphs, ORSA/TIMS Joint National Meeting, St. Louis, MO, USA, October 1987.

REFEREEING ACTIVITIES

Reviewing articles for a number of journals including:

Annals of Operations Research
Central European Journal of Operations Research
European Journal of Operational Research
Electronic Commerce Research
International Journal of Operations and Quantitative Management
International Journal Computers and Mathematics with Applications
International Transactions in Operations Research
Journal of Computing and Information Technology
Journal of Game Theory
Location Science
Management Science
Mathematical Programming
Mathematics of Operations Research
Mathematics of Social Sciences
Matematički Glasnik
Networks
Networks and Spatial Economics
Telecommunication Systems
Telecommunication Policy
Top.

Reviewing textbooks in Management Science and MIS, **Prentice Hall.**

Reviewing textbooks in Management Information Systems, **McGraw Hill.**

Reviewing books for **Kluwer Academics Publisher, Springer.**

PROFESSIONAL MEMBERSHIP

The Institute for Operations Research and Management Science (INFORMS),
Croatian Operational Research Society (CRORS).
Global Association of Risk Professionals (GARP).
National Business and Economic Society (NBES).

REFERENCES Available upon request