CURRICULUM VITA

Israel Spiegler

PERSONAL

> Home: 58 Bilu St. Raanana, 43581 Israel
> Office: Faculty of Management, Tel Aviv University
> Tel: 972-3-640-7488, spiegler@post.tau.ac.il
> Home Page: http://recanati.tau.ac.il/~spiegler
> Born: March 9, 1944, Russia
> Married (Bracha), Three children

EDUCATION

1977   Ph.D. Computers and Information Systems
The Anderson Graduate School of Management, U.C.L.A
> A Computer Aided Methodology for Bridging Analysis and
> Construction in the Design of Information Processing Systems.
> Supervisor: Professor Clay Sprowls

1972   M.Sc. Computers and Information Systems
The Anderson Graduate School of Management, U.C.L.A

1970   B.Sc. Information Systems, School of Business Administration
California State University, Los Angeles, California

1970   B.A. Education
University of Judaism, Los Angeles, California

ACADEMIC

2007   Visiting Scholar (spring), Information Systems Group,
Information & Operations Management Science Department
Stern School of Business, New York University, New York

2006   Visiting Professor (fall), Artificial Intelligence Research Group,
Computer Science, School of Engineering and Applied Sciences
Harvard University, Cambridge, Massachusetts

2006   Incumbent, the Mexico Chair of Management Information Systems
Graduate School of Management, Tel Aviv University

2003   Professor, Technology and Information Systems Program
Graduate School of Management, Tel Aviv University

1999-01   Visiting Professor, School of Information Science
Claremont Graduate University, Claremont, California

| 1993 | Associate Professor, Information Systems Program
Graduate School of Management, Tel Aviv University |
|---|---|
| 1990-92 | Visiting Associate Professor, Information Sciences Program
Claremont Graduate School, Claremont, California |
| 1987 | Senior Lecturer with Tenure, Information Systems Program
Graduate School of Management, Tel Aviv University |
| 1986 | Visiting Associate Professor (summer), CIS Department
The Anderson Graduate School of Management, U.C.L.A |
| 1984-86 | Lecturer, Information Systems Program
Graduate School of Management, Tel Aviv University |
| 1982-84 | Associate Professor, Management Information Systems
School of Management, Boston University |
| 1978-82 | Post-Doctoral and Teaching Fellow, Information Systems
Graduate School of Management, Tel Aviv University |
| 1976-78 | Assistant Professor, Management Information Systems
School of Management, Boston University |
| 1972-74 | System Analyst, System Development Corp. (SDC), California
Data Sharing on Computer Networks
The ARPANET project (Internet Forerunner) |

ACADEMIC ADMINISTRATION:

| 2004-06 | Vice Dean of Faculty
Chair, Educational Program Committees
Graduate School of Management, Tel Aviv University |
|---|---|
| 2004-06 | Chair, Academic Program Committees:
Kellogg and Recanati Executive MBA Programs
Wharton – Tel Aviv Consulting Program for MBA |
| 2004-06 | Established, Designed and Chaired
MBA Engineering Program
Graduate School of Management, Tel Aviv University |
| 2005 | Elected, Board of Governors, Tel Aviv University |
| 2003-05 | Chair, Doctoral Program Committee
Graduate School of Management, Tel Aviv University |
| 2002-03 | Member, Committee for Approval of New Graduate Programs
Higher Education Commission (MaLaG) |

1993-99   Chair, Information Systems Program,
Graduate School of Management, Tel Aviv University

1992-99   Academic Director, CEMIS Computational Center
Graduate School of Management, Tel Aviv University

1992-05   Chair, Faculty Computer Committee
Graduate School of Management, Tel Aviv University

1995-02   Senior Program Advisor, Information Systems Courses
Computer Science, MBA program
The Open University, Tel Aviv and Raanana

1989   Chair, Databases and Artificial Intelligence
Artificial Intelligence in Industry Conf., Hydrabad, India

1987-90   Academic Director, LAHAV Top Executive Course
Graduate School of Management, Tel Aviv University

1987   Chair, Artificial Intelligence Section
IEEE-ICCA Conference, Beijing, China

1984-85   Director, MIS in Health Care Delivery,
Harvard Brigham Hospital and Boston University.

1981-82   Academic Director, MBA one-year Program
Graduate School of Management, Tel Aviv University

1976-78   Coordinator and Acting Chair, MIS Program
School of Management, Boston University

EDITORAIL ACTIVITIES:

Board: Information & Management
Journal of Database Management
Journal of Information Science and Technology
Reviewer: IEEE Transactions of Information Systems
Communications of the ACM
Communications of Association of Information Systems (AIS)
Journal of Association of Information Systems
Information Systems
Computers & Operations Research
MIS Quarterly
Database
Expert Systems
International Conference on Information Systems (ICIS)

PROFESSIONAL

2003 -	Director, Arkia-Knafaim Holding Co.
1997-02	Director, Yozma, pension fund, Migdal Insurance Co.
1996	Chair, National Award Committee for Computing Research
	Israel Ministry of Science
1994-98	Senior Advisor, Bank Tefahot, Database and Computation
1994-99	Member of Board, Formula Inc
1993-95	Israel Ministry of Education, Computers Curriculum Committee

MEMBERSHIP

ACM	Association for Computing Machinery
IEEE	Computer Society
AIS	Association of Information Systems
KDD	Knowledge Discovery in Databases
ILA	Israel Association of Information Processing

GRANTS and AWARDS:

1982	Outstanding Teaching award (Regularly on high teacher ranking)
1982	Mia Fisher-David Research Grant, Tel Aviv University
1989	Information as Inventory, Adams Institute of Information Systems, (with Ronen)
1992	Heterogeneous Databases, Research Grant, Adams Institute of Information Systems
1994	Dean's Award: Outstanding Faculty Member of the Year
1995	An Intelligent System for Routing Information Requests in Heterogeneous Network Ministry of Science (with Ein-dor, Giladi, Shoval)
1996	Representation and Storage of Knowledge with a Binary Database, Israel Institute of Business Research
1997	Citation of Excellence, Highest Quality Paper Rating, "Synergetic Expert Systems", Decision Support Systems, May 1996, ANBAR Electronic Intelligence
1998	Hempel Raven Paradox as Basis for Clustering Data, Israel Institute of Business Research
2000	Mining Data the Positive Way, Israel Institute of Business Research
2004	Comparative Clustering Methods, Henry Crown Research Institute
2006	"Technology and Knowledge", Information and Management, Third on Top 10 articles in MIS, Elsevier Science Direct, 2006.

INVITED LECTURES and SEMINARS (recent):

1999	University of Rochester, School of Management, Binary Data Clustering
2000	Stanford University, Medical Informatics, School of Medicine Data Mining: A Positive Approach
2002	Data Mining Models, Dept of Information System Engineering, BG University
2005	Business Transformations, Carmel Executive Conference, Haifa
2006	From Databases to Knowledge Discovery, IT Security Program, Tel Aviv

2006   Harvard University, Artificial Intelligence Research Group,
        Future Databases Models for Clustering and Mining

DOCTORAL DISSERTATIONS Completed:

1.   Berg, A. Intelligent Knowledge Generation from Statistical Databases, 1992
2.   Gelbard, R. Characterization, Representation and Recognition of
        Movement Patterns, 1995
3.   Aronovitz, L., Similarity Search in Metric Databases, 2006
4.   Ben Zvi, T., The Knowledge Discovery Process: An Analytical Investigation and
        Empirical Affirmation, 2007
5.   Pollak, Z., Incremental Data Mining: Model, Methods, and Algorithms
        (with Zahavi), 2007

DOCTORAL DISSERTATIONS in Progress:

1.   Tel Nir, R., Binary Positive Databases in Bioinformatics Discovery (with Gelbard)
2.   Goldman, O., Clustering and Data Mining in Medicine (with Leshno)
3.   Zirinsky, D., Knowledge Determination via Ontological Analysis
4.   Carmi, E., Data Mining and Imgae Processing
5.   Holtzman, V., A Methodology for Risk Management Based on Content Analysis

MASTER THESES Completed:

1.   Kopelick, M. Storing and Retrieving Text Information on Mini Computer, 1982
2.   Maayan, R. Binary Data Bases: Model for Storage and Retrieval, 1982
3.   Dayan, Empirical Study of CICS/VS Functions as a DB/DC System, 1983
4.   Elata, S. A Priori Analysis of Natural Language Queries, 1986
5.   Gavish, G. Prototyping in Information System Development, 1986
6.   Abramovitz, A. Data Base Integrity Testing: Technique and Application, 1986
7.   Brener, E. Logical Security for Statistical Data Bases, 1986
8.   Widder, D. Decision Support System for Designing Network Data Bases, 1987
9.   Kapeliuk, A. A Model for Selecting MRP Packages, 1987
10.   Uliel, S. A Model for Testing the Cost of Computer Maintenance, 1987
11.   Gat, Yoel. The BAZAK Mail Delivery System, 1987
12.   Amir, S. A Data Base for a Time Scheduling System, 1988
13.   Shefer, A. Data Independence in Information System Environment, 1988
14.   Nassiripor, K. An Expert System for Civil Engineering Projects, 1989
15.   Shirtz, D. A DSS for Monitoring Large Scale Communication Systems, 1989
16.   Gelbard, R. Binary Representation of Taxonomic Data, 1989
17.   Weintraub, E. Semantic Nets as Basis for Accessing Multiple Data Bases, 1990
18.   Strassman, A. A Fuzzy Relational Data Base, 1991
19.   Beeri, Y. SES: Synergetic Expert System, 1991
20.   Kalfus, O. Information as Inventory: Evaluating Data Necessity, 1991
21.   Moriah, A. Geometric Data Base Representation, 1995
22.   Weiss, A. A Model for Implementing Objects on Relational Data Bases, 1995
23   Nissim, Z. Genetic Algorithms Use in Information Systems, 1996
24.   Zysberg, H. Data Driven Formulas in Object Oriented Databases, 1999
25.   Pollack, Z. Rule Induction using Genetic Algorithms, 1999

26. Aronowitz, L. Dimensional Data Model and Information Theory, 2000
27. Sarna, D., Intelligent Agents and Search Strategy, 2001 (with Nir)
28. Kozlovsky, N., Methodology of Limited Resources Selection, (with Ronen) 2002
29. Cohen, S., A New Ranking Algorithm for Search Engines, 2002
30. Valan, N., A New Approach to Text Mining via Structured HTML Pages, 2002
31. Kozushner, O., The Clic Imprint: A Basic Unit for Consumer Behavior, 2002
32. Singer, L., A Query Model for Biological Data Domains, 2003
33. Aspir, O., Connecting Analysis and Project Management with UML, 2003
34. Lampert, A., The Open Code Impact on Information Systems, 2004
35. Zirinsky, D., Knowledge Determination via Ontological Analysis, 2004
36. Kelks, O., Can Web Services Deliver the Promise?, 2004
37. Dvir, U., Literature-Based Discovery as New Web Search Tool, 2005
38. Patashnik-Zahav, Y., Computer Handwriting Identification, 2006
39. Agron, S., eXtreme Programming, 2007
40. Golan, A., A Model for Data Aging in Databases, 2007
41. Geron-Iseres, M., Cluster Identification in Large Population.

RESEARCH INTERESTS

Data Base Management Systems (DBMS)
Knowledge Representation and Management
Clustering and Data Mining
Artificial Intelligence, Natural Language Processing
Information System Analysis and Design

COURSES TAUGHT - Graduate

Computing, Programming Languages, Software
File Management, Databases, Data Modeling
Management Information Systems
Technology and Information Systems Policy
Decision Support Systems
Knowledge Management
Electronic Markets and Commerce
System Analysis and Design
Artificial Intelligence/Natural Language Processing

PUBLICATIONS

Articles Published:

1. Shoshani, A., and Spiegler, I., "The Integration of Data Management Systems on a Computer Network: AIAA Conference on Computer Network Systems, April 1973, Atlanta (ARPANET data sharing project, Internet forerunner)

2. Spiegler, I., "Modeling Man-Machine Interface in a Data Base Environment", Int Journal of Man Machine Studies, January 1983, Vol. 18 No1, pp. 55-70

3.   Spiegler, I., "MIS and DBMS: Where Does One Start and the Other End", Journal of System Management, June 1983, pp. 34-42

4.   Spiegler, I., "Automating Data Base Construction", Data Base, ACM Publication, Spring 1983, Vol. 14, No.3, pp. 21-29

5.   Spiegler,I., Ben-Bassat, M., Dreizin, Y., and Karmon, Y., "Evaluating the Performance Capability of a Multi Organization System", OMEGA, Journal of Management Science, September 1983, Vol. 11,5 pp. 417-432

6.   Spiegler, I., and Maayan, R., "Storage and Retrieval Considerations of Binary Data Bases", Information Processing & Management, Vol 21,3 January 1985 pp. 233-254.

7.   Ein-Dor, P., and Spiegler,I., "Answerability of Data Base Queries", Information Systems, Vol. 10,3, 1985, pp. 261-270

8.   Spiegler, I., "Approaches to Information System Development: A Managerial Perspective", Int Journal of Management, Vol. 3,3, September 1986, pp. 35-46

9.   Spiegler, I. and Trauth, E., "A Framework for Office Automation Education", Journal of Computer Information Systems, Vol. 28,2 Winter 1987/88, pp. 32-38

10.   Spiegler, I., and Tsirulnikov, L., "A Conceptual Approach for Describing Information System Projects", Human System Management, Vol. 7, 1988, pp. 349-357

11.   Spiegler, I. and Elata, S., "A Priori Analysis of Natural Language Queries", Information Processing & Management, Vol. 24,6 1988, pp. 619-631

12.   Shtub, A., Spiegler,I., and Kapeliuk,A., "Using DSS Methods in Selecting Operations Management Software", Computer Integrated Manufacturing Systems Vol. 1, No. 4, November 1988

13.   Spiegler, I., and Noff, Y., "Dynamic Reliability as an Alternative to Database Restoration", Computers & Operations Research, Vol. 16,1 1989, pp. 27-38

14.   Ahituv, N., and Spiegler, I., "A Metalanguage Design for Sessions with Group Decision Support Systems", Computer Science in Economics and Management, Vol. 2, 1989, pp. 151-169

15.   Ein-Dor, P., Spiegler, I., " Development of a Natural Language Query Systems for Multiple Databased", in Balagurusamy (ed), Artificial Intelligence in Industry and Government, November 23-25, 1989, Hydrabad, India, New Delhi, Macmillan India, 1989

16.   Ronen, B., and Spiegler, I., "Information as Inventory: A New Conceptual View", Information & Management, Vol. 21, 1991, pp. 239-247

17.   Berg, A., and Spiegler, I., "Intelligent Knowledge Generation from Statistical Data Bases", <u>Journal of Information Science and Technology</u>, Vol. 2,1 October 1992, pp.1-11

18.   Spiegler, I., and Herniter, G., "Warranty Cards as a New Source of Industrial Marketing Information", <u>Computers in Industry</u>, Vol. 22,3 February 1993, pp. 273-281

19.   Spiegler, I., "Neural Data Bases: A Model for Data Storage and Retrieval", <u>Journal of Information Science and Technology</u>, Vol. 2,4 July 1993 pp. 332-345

20.   Spiegler, I., and Widder, D., "Physical Database Design: A Decision Support Model", <u>Data Base</u>, Vol. 24,3 August 1993, pp. 5-11

21.   Spiegler, I., and Herniter, G., "Forecasting Retail Sales and Dealer Inventories: A Simulation and Decision Support System", <u>Simulation</u>, Vol. 61, No. 4 October 1993, pp. 269-275

22.   Spiegler, I., "The Evolution of a Unified View of Data", <u>Information Systems Management</u>, Vol. 12,2, Spring1995, pp. 7-14

23.   Spiegler, I., "Information Systems as a Construct of Transformations", <u>IEEE System, Man, and Cybernetics</u>, Vol. 25,7 July 1995, pp. 1121-1129

24.   Ein-Dor, P., and Spiegler, I., "Natural Language Access to Multiple Data Bases: A Model and a Prototype", <u>Journal of Management Information Systems</u>, Summer 1995, Vol.12, No 1, pp. 171-197

25.   Beeri, Y., and Spiegler, I. "Synergetic Expert Systems", <u>Decision Support Systems</u>, Vol. 17. No.2, May 1996, pp. 73-82

26.   Eden, Y., Ronen, B., and Spiegler, I., "Storing Too Much Information in the Insurance Industry", <u>International Journal of Computer Applications in Technology</u>, Vol. 9, 2/3, 1996, pp. 144-150

27.   Gelbard, R. and Spiegler, I., "Hempel's Raven Paradox: A Positive Approach to Cluster Analysis", <u>Computers & Operations Research</u>, Vol. 27, April 2000

28.   Berg, A., and Spiegler, I., "User Profiles as Basis for Electronic Consulting System", <u>Communications of the AIS</u>, Vol. 3 No. 12, May 2000

29.   Spiegler, I., "Knowledge Management: A New Idea or a Recycled Concept", <u>Communications of the AIS</u>, Vol. 3 No. 14, June 2000

30.   Gelbard, R., Pliskin, N., and Spiegler, I., "Integrating Systems Analysis and Project Management Tools", <u>Journal of Project Management</u>, Vol. 20 No. 6, July 2002, pp. 461-468

31. Erlich, Z., Gelbard, R., and Spiegler, I., "Data Mining by Means of Binary Representation: A Model for Similarity and Clustering", <u>Information Systems Frontiers,</u> July 2002

32. Gelbard, R. and Spiegler, I., "Representation and Storage of Motion Data", <u>Journal of Data Management</u>, Vol. 13 No. 3, July 2002, pp. 46-63

33. Spiegler, I., "Technology and Knowledge: Bridging a 'Generating' Gap", <u>Information & Management,</u> Vol. 40 No. 6, July 2003, pp. 533-539

34. Erlich, Z., Gelbard, R., and Spiegler, I., "Evaluating a Positive Attribute Clustering Model for Data Mining", <u>Journal of Computer Information Systems</u>, Vol 43 No. 3, Spring 2003, pp. 100-108

35. Cohen, S., and Spiegler, I., "A New Sorting/Ranking Algorithm for Search Engines", <u>Software Systems and Technology</u>, Vol 3. No. 2, 2003

36. Kalfus, O., Ronen, B., and Spiegler, I., "A Selective Retention Approach in Massive Databases", <u>OMEGA, Int. Journal of Management Science</u>, Vol 32.2, April 2004, pp. 87-95

37. Spiegler, I., Gelbard, R., " Unified Binary Model and Methodology for Knowledge Representation and for Data and Information Mining", published <u>United States Patent</u>, No. 6,728,728, April 27, 2004

38. Gelbard, R., and Spiegler, I., "Living with Database Conflicts: A Temporal Branching Technique", <u>Distributed and Parallel Databases</u>, Vol 17, May 2005, pp. 251-265

39. Gelbard, R., Goldman, O., Spiegler, I., "Investigating the Diversity of Clustering Methods: An Empirical Comparison", <u>Data and Knowledge Engineering,</u> Vol 63.1, October 2007, pp. 155-166

40. Aronovitz, L, and Spiegler, I., "CM-tree: A dynamic clustered index for similarity search in metric databases", <u>Data and Knowledge Engineering</u>, Vol 63.1, December 2007, pp. 917-944

41. Grossfeld-Nir, A., Sarne, D., and Spiegler, I., "Modeling the Search for the Least Costly Opportunity", <u>European Journal of Operation Research,</u> forthcoming 2007

Papers Submitted:

1. Pollak, Z., Spiegler, I., Zahavi, J., "Rule Based Association and Data Mining", submitted to <u>Knowledge Discovery and Data Mining</u>

2. Leshno, M., Rapaprot, S., Spiegler, I., "Women's and Men's Attitude toward Risk in Medical and Financial Decision Making", submitted to <u>Medical Decision Making</u>

3. Morgan, T., Ein-Dor, P., Spiegler, I., Giladi, R., Etzion, O., "Fast Natural Language Query Analysis for Inter/Intranet Access", submitted to <u>Natural Language Engineering</u>

Book Chapters

1. Gelbard, R., and Spiegler, I., "Modeling Motion: Building Blocks of a Motion Database", in <u>Advanced Topics in Database Research</u>, Vol 3, Keng Siau (Ed.), Idea Group Publishing, 2004

Papers Presented in Scientific Meetings

1. Ein-Dor, P., Spiegler, I., "Context Determination for Natural Language Queries", <u>Text and Context</u>, Cognitive Symposium III July 4-7, 1988

2. Ein-Dor, P. Spiegler, I., "Natural Language Access to Multi Databases", Int. Conference on AI and Expert Systems, Hyderabad, India, Dec. 1989

3. Spiegler, I., and Widder,D., "A Decision Support Model for Data Base Design", <u>IEEE Computer Society Press</u>, Fourth Israel Conference on Computer Systems and Software Engineering, June 1989, pp. 27-33

4. Berg, A., and Spiegler,I., "Intelligent Knowledge Generation from Statistical Data Bases", International Workshop on Artificial Intelligence and Statistics, January 1991, Florida

5. Spiegler, I., and Weintraub, E., "A Semantic Network as a Basis for Natural Language Interface for Database Queries", Proc. Of the National Conference on Data Processing, Jerusalem, Nov. 1992

6. Shoval, P., Ein-Dor, P., Giladi, R., and Spiegler, I., "A Metaknowledge Base and a Search Mechanism for Distributed Heterogeneous Databases", Ass. of Information Systems (AIS) conference, Tucson, Arizona, August 1996

7. Grossfeld-Nir, A., Sarna, D., and Spiegler, I., "Modeling the Search for the Least Costly Opportunity", ORSIS Conference, May 2002

8. Ben-Zvi, T., and Spiegler, I., "Data Mining and Knowledge Discovery: An Analytic Investigation", AMCIS Conf., August 2007, Colorado

9. Pollak, Z., Spiegler, I., and Zahavi, J., "Incremental Data Mining", INFORMS Conf., Seattle, Novermber 2007

Other Research

1. Ein-Dor, P., Spiegler, I., " A Fuzzy Logic of Contexts for Natural Language Queries in Multiple Database Environment", Tel Aviv University, Working Paper, Aug. 1986

2.	Spiegler, I., Zinger, L., "Genetic Databases: Construction, Retrieval, and Access", Tel Aviv University, Working Paper, 21/2003