CURRICULUM VITAE

Name	Alon Itai,
Born:	1946, Britain.
Immigration:	1953.
Personal:	Married $+$ two children.

Academic Degrees:

1969	B.Sc.	Mathematics and Physics, Hebrew University, Jerusalem.
1971	M.Sc.	Computer Science, Feinberg Graduate School of the Weizmann Institute of Science,
		Rehovot.
1976	Ph.D.	Computer Science, Feinberg Graduate School of the Weizmann Institute of Science, Rehovot.

Employment:

1976-78	Lecturer, Dept. of Computer Science, Technion
1978-79	Visiting Lecturer, Dept of EECS, Computer Science Division, University of California, Berkeley.
1979-86	Senior Lecturer, Dept. of Computer Science, Technion-IIT, Haifa.
1984 - 85	Visiting Associate Professor, Dept. of Computer Science, University of Chicago.
1986 - 96	Associate Professor, Dept. of Computer Science, Technion-IIT, Haifa.
1991-92	Visiting Scientist (MTS). AT&T Bell Laboratories, Murray Hill, N.J.
1996-	Full Professor, Dept. of Computer Science, Technion.
2015-	Professor emeritus, Dept. of Computer Science, Technion.

Teaching Experience:

- Natural Language Processing –Technion.
- File Systems Technion.
- Data Structures Technion and UC-Berkley.
- Advanced Course on Data Structures Technion.
- Complexity of Combinatorial Algorithms Technion.
- Graph Theory Technion, UC-Berkley and The University of Chicago.
- Corpora Based NLP (course, seminar and project) Technion.
- Artificial Intelligence (including a laboratory) Technion.
- Computability and Logic Technion.
- Introduction to Systems Programming Technion.
- Machine Structure (Assembler and Software) UC-Berkley.
- Introduction to Programming (FORTRAN, PL/I, Pascal).

Professional Experience:

1983	Advisor to Motorola Israel – Compiler Construction.
1994 - 1995	Advisor to HartSoft, Migdal Ha-Emeq – Optimal allocation of disks.
1996 - 1997	Advisor to EMC, Hopkinton, Massachusetts.
1998 - 1999	Advisor to ORI Software, Tel-Aviv – Representation of data and database implementation.
2000-2001	Sabbatical at BigSnoop, Haifa – Analyzing Online Texts.

Administrative Posts:

1983-84	Director of undergraduate studies, Dept. of Computer Science, Technion.
1987-89	Director of graduate studies, Dept. of Computer Science, Technion.
1989-91	Member of the Technion Steering Committee for Computing.
1990-91	Vice Chairman. Dept. of Computer Science, Technion.
1995-96	Member of the Committee for Allocation of Prizes of the Technion Graduate School.
1996-97	Director of undergraduate studies, Dept. of Computer Science, Technion.
1997-99	Vice dean for teaching, Dept. of Computer Science, Technion.
1997-99	Chairman of Technion Senate Library Committee.
1997-2000	Member of Technion Senate Committee for Undergraduate and Graduate Studies.
2000	Member of the Technion Senate nominations and promotions committee.
2002 - 2005	Dean, Dept. of Computer Science, Technion.
2009-2014	Head Technion Faculty Association.

Membership in Scientific Associations

ACM - since 1985.

Prizes:

- 1976 Feinberg Graduate School of the Weizmann Institute of Science prize in memory of Gad Reshef.
- 1977 ILA prize for the paper Interpolation Search a Log Log N Search (shared with Y. Perl and H. Avni).
- 1990 Taub Prize in Computer Science

Program Committees:

- 1990 ILA Scholarships for Graduate Students (chairman).
- International Workshop on Computational Learning Theory, COLT 91
- WDAG '91, Delphi, Greece.
- ISTCS '92 The Israel Symposium on the Theory of Computing and Systems, Haifa, Israel, May 1992.
- ESA '94 European Symposium on Algorithms, Utrecht, The Netherlands, September 1994.
- ICGI '98 International Conference on Grammatical Inference, Iowa, August 1998.
- SemLan Workshop on Semitic Languages, ACL. Prague 2007.

• ISCOL – Israeli Symposium on Computational Linguistics. 2005, 2006, 2007, 2008.

Editorial Board:

1995– Journal of Graph Algorithms and Applications.

National Committees:

- Israel National Academy of Science, funding committee, 1998.
- Accreditation Committee of the Israel Higher Education Council, Michlala Le-Minhal Rishon Le-Zion, 1998.
- Accreditation Committee of the Israel Higher Education Council, Jerusalem Technological College (Chairman), 1999.
- Accreditation Committee of the Israel Higher Education Council, MSc. Program of the Interdisciplinary Center, Herzliyya, 2001.
- Israel National Academy of Science, funding committee, 2008.
- Accreditation Committee of the Israel Higher Education Council, Natanya Academic College. 2007-2008.

International Committees:

- Evaluation Committee, Department of Computer Science, The University of Cyprus, Nicosia, Cyprus. October 2008.
- Expert delegate for ICT (Information and Communication Technologies) for FP7.

Funded Research

Research Grants

- "Study in Machine Learning", Fund for Research in Electronics, Computers and Communication, Israel Academy of Science, 1988. \$5,000.
- "Statistical and Multi-Lingual Methods for Natural Language Processing", Israel National Council for Research and Development, Ministry of Science and Technology, 1990. 50,000 Sheqel.
- "Research in Natural Language Processing", Intel, 1994. \$ 15,000.
- "Corpora Based Methods for Processing Hebrew" Ministry of Science, 1998-2000. 420,000 Sheqel.
- "Hebrew Linguistics Knowledge Center", Ministry of Science, 2003-2005, 1,700,000 sheqel per year.

- "Acquiring Multi-word expression in Hebrew", ISF, 195,000 sheqel per year, 2007-2011.
- "Hebrew Morphological Analyzer", Nogacom, \$30,000, 2008-2010.
- "Hebrew Morphological Analyzer", FAST, 35,000 Euro, 2008-2009
- "Hebrew Morphological Analyzer", Basis, \$32,000, 2010-2011
- "Hebrew Morphological Analyzer", Google, \$60,000, 2012-2013
- "CAPER", EU, 92,000 Euro (Itai's part), 2011-2015.
- "Using Natural Language Processing to Extract Situated Knowledge from Public Comments in Complex Policymaking", 50,000 sheqel, (Itai's part), JTCII, 2012-2013.
- "Tools for increasing the accessibility of Internet sites for people with disabilities", 300,000 sheqel, Israel Internet Society.
- "Citizen Science", Technion, \$100,000, 2014-2015.

Equipment Grants:

- Laboratory for Artificial Intelligence \$ 370,000 for purchasing Symbolics LISP Machines. VATAT and Technion, 1986.
- Laboratory for Intelligent Systems \$ 250,000 VATAT and Technion, 1988.

Projects

- 1. An Automatic System for Checking Graduation Requirements, (1982).
- 2. Statistical Methods for Disambiguation in Natural Languages (1988-92). (The project provided the software environment needed for the research with Ido Dagan, Moshe Levinger and Shaul Marcus.)
- 3. An advisory program for prospective students (1991).
- 4. Timing package for COSPAN (AT&T Bell Laboratories 1992).
- 5. Simulator of multi-disk environment Technion (1994-5).
- 6. Morphological disambiguation for Hebrew Technion (1996-1999).
- 7. Corpora based method for parsing Hebrew Technion (2000-).

Patents

- Verification of Systems Subject to Delay Constraints. R. Alur, A. Itai, R. Kurshan and M. Yannakakis. European Patent Number 93304718.5-1993
- Apparatus and Methods for Grammatically Aware Text Processing. A. Itai. Technion, Provisional 2007.

• Translating Domain Specific Terminology - Acquisition and Applications A.Itai, Applied 2013.

Current Research Interests

Corpora Based Natural Languages Processing, Processing Hebrew, Integrating Audio and Text, Data Structures, Memory Management (cache and disks).

Graduate Students:

M.Sc.			
(1)	Aythan Avior	Representation of files	1984.
(2)	Leon Rubenstein	Typesetting languages	1984.
(3)	Eyal Odiz	Checking style errors in English	1987
(4)	Ören Hurwitz	Intelligent scan	1989
(5)	Ehud Hausmann	Natural language interface to ERROL	1989
		(principle-supervisor: E. Kanterowitz).	
(6)	Alon Lavie	Two level morphology	1989
		(co-supervisor: U. Ornan).	
(7)	Miri Sharon	Learning automata	1990
(8)	Alon Efrat	A simple algorithm for maintaining the center	
		of a planar point-set	1993
(9)	Jason Glasgow	Scheduling parallelizable tasks	1993
		(principle-supervisor: H. Shachnai)	
(10)	Boris Farizon	Local and global memory for the implementation	
		of ray tracing on a parallel machine	1996
(11)	Avigail Orni	Measuring the locality of space-filling curves	1999
(12)	Er'el Segal	Probabilistic morphological analysis for	
		Hebrew undotted texts	2000
(13)	Dmitry Levinson	Word disambiugation using probabilistic clustering	2000
(14)	Alexander Gorovoy	Applying data compression algorithms to Software	
		Engineering (co-supervisor: Y. Gil).	2000
(15)	Irit Katriel	Improving the complexity of a data structure	
		based on a linear array	2001
(16)	Michael Slavkin	Detecting Data Structures from Traces.	2005
(17)	Einav Itamar	Using Movie Subtitles for Creating Statistical	
		Alignment Models	2008
(18)	Saeb Mansour	Combining Character and Morpheme Based Models	
(10)	371 TT	for Parts of Speech Tagging of Semitic Languages	2008
(19)	Nir Kerem	Effects of Prototypical Understanding on the Interpretation	2010
(20)	T 1 TT7 /	of Reciprocal Expressions (co-supervisor Prof. Y. Winter)	2010
(20)	Joshua Wortman	Extraction and analysis of linguistic-encoded data trends	2010
(01)		from a novel domain	2010
(21)	Daniel Hurwitz	Morphological and lexical decomposition as a basis	0010
$(\mathbf{n}\mathbf{n})$	II	for identifying multiword expressions.	2012
(22)	Hanna Fadida	Hebrew multi-word verbs (co-supervisor Prof. S. Wintner)	2012
(23)	Avishai Gretz	Syntactic annotation and parsing of the Hebrew CHILDES database(co-supervisor Prof. S. Wintner)	2013
(24)	Kayla Jacobs	Hebrew Acronym Extraction and acronym dictionary	
(24)	1xay1a Jacobs	construction(co-supervisor Prof. S. Wintner)	2014
(25)	Nitsan Chrisman	How to construct multi-lingual domain ontologies	2014 2016
(20)	misan Omisman	now to construct mutit-ingual domain ontologies	2010

Ph.D.

(1)	Avram Zehavi	Connectivity problems in graphs	1986
(2)	Gyora Benedek	Learnability of concept classes by sampling	1989
(3)	Hadas Shachnai	Maintaining dynamic linear lists by	
		counting schemes (principle-supervisor: M. Hofri)	1991
(4)	Ido Dagan	Automatic acquisition of natural language	
		patterns for the resolution of ambiguities	1992
(5)	Yona Hollander	Data structures for cache memory	1996
(6)	Gilad Ben-Avi	Types and meanings in intensionality,	2008
		selection and quantifier scope	
(7)	Roman Talyansky	Sample complexity of learning Markov Chains	2015

PUBLICATIONS

Theses

- **M.Sc.** Queues, Stacks and Graphs, Supervisor Prof. Shimon Even, Feinberg Graduate School of the Weizmann Institute of Science, (1971).
- **Ph.D.** Multi-Commodity Flow, Supervisor Prof. Shimon Even, Feinberg Graduate School of the Weizmann Institute of Science, (1976).

Refereed Journals (appeared):

- 1. A. Itai, Optimal Alphabetic Trees. SIAM J. on Computing, 5, 9-18, (1976).
- S. Even, A. Itai and A. Shamir, On the Complexity of Timetable and Multi-Commodity Flow. SIAM J. on Computing, 5, 691-703, (1976).
- Y. Perl, A. Itai and H. Avni, Interpolation Search A log log N Search, Communications of the ACM, 25, 550-553, (1978).
- 4. A. Itai, Two Commodity Flow, J. ACM, 25, 596-611, (1978).
- A. Itai, M. Rodeh and S. Tanimoto, Some Matching Problems in Bipartite Graphs. J. ACM, 25, 517-525, (1978).
- 6. A. Itai and M. Rodeh, *Finding a Minimum Circuit in a Graph.* SIAM J. on Computing, 7, 413-423, (1978).
- A. Itai and Y. Shiloach, Maximum Flow in Planar Networks. SIAM J. on Computing, 8, 135-150, (1979).
- 8. A. Itai, A Randomized Algorithm for Checking Equivalence of Circular Lists. Processing Letters, 9, 118-121, (1979).
- 9. A. Itai and M. Rodeh, Representations of Graphs. Acta Informatica, 17, 215-219, (1982).
- 10. A. Itai, Y. Perl and Y. Shiloach, *The Complexity of Finding Maximum Disjoint Paths with Length Constraints*. Networks, 12, 277-286, (1982).
- A. Itai, C. H. Papadimitriou and J. Schwarcfiter, *Hamilton Paths in Grid Graphs*. SIAM J. on Computing, 11, 676-686, (1982).
- A. Itai, R. J. Lipton, C. H. Papadimitriou and M. Rodeh, *Covering a Graph by Simple Cycles*. SIAM J. on Computing, 10, 746-750, (1981).
- A. Itai and D. K. Pradhan, Synthesis of Multi-Commodity Flow Problems. Networks, 14, 213-224, (1984).
- 14. A. Itai and Z. Rosberg, A Golden Ratio Control Policy for a Multiple-Access Channel. IEEE Trans. on Automatic Control, 29(7), (1984).
- 15. A. Itai and A. Zehavi, Bounds on Path Connectivity. Discrete Math., 51, 25-34, (1984).

- A. Itai and M. Rodeh, Scheduling Transmissions in a Network. Journal of Algorithms, 6, 409-429, (1986).
- A. Israeli and A. Itai, A Fast and Simple Randomized Parallel Algorithm for Maximal Matching. Information Processing Letters, 22, 77-80, (1986).
- A. Itai, N. Alon and L. Babai, A Fast and Simple Randomized Parallel Algorithm for the Maximal Independent Set Problem. J. Algorithms, 7, 567-583, (1986).
- A. Itai and J.A. Makowsky, Unification as a Complexity Measure for Logic Programming. J. of Computational Logic 4(2), 105-117, (1987).
- O. Shmueli and A. Itai, Complexity of Views: Tree and Cyclic Schemas. SIAM J. Computing, 16-1, 17-37, (1987).
- A. Itai and M. Rodeh, The Multi-Tree Approach to Reliability in Distributed Networks. Information and Computation, 79(1), 43-59, (1988).
- A. Itai and Y. Raz, The Number of Buffers Required for Sequential Processing of a Disk File. Comm. ACM. 31(11), 1138-1342, (1988).
- 23. A. Zehavi and A. Itai, Three Tree-Paths. J. of Graph Theory, vol. 13(2), 177-188, (1989).
- A. Itai, S. Kutten, Y. Wolfstahl and S. Zaks, Optimal Distributed t-resilient Election in Complete Networks. IEEE Trans. on Software Engineering, 16(4), 415-420, (1990).
- A. Itai and M. Rodeh, Symmetry Breaking in Distributed Networks. Information and Computation, 88(1), 60-87, (1990).
- 26. G. Benedek and A. Itai, *Learnability by Fixed Distributions*. Theoretical Computer Science, 86, 377-389, (1991).
- 27. I. Dagan and A. Itai, A Set Expression Based Inheritance System. Annals of Mathematics and Artificial Intelligence, 4, 269-280, (1991).
- 28. R. Bar-Yehuda, O. Goldreich and A. Itai, *Efficient Emulation of Single-Hop Radio Network with Collision Detection on Multi-Hop Radio Network with no Collision Detection*. Distributed Computing, 5, 67-71, (1991).
- R. Bar-Yehuda, O. Goldreich and A. Itai, On the Time Complexity of Broadcast in Radio Networks: an Exponential Gap between Determinism and Randomization. J. Comp. and Sys. Science, 45, 104-126, (1992).
- R. Bar-Yehuda, A. Israeli and A. Itai, *Multiple Communication in Multi-Hop Radio Networks*. SIAM Journal on Computing, 22, 875-887, (1993).
- S. Gal, Y. Hollander and A. Itai, Optimal Mappings in a Direct Mapped Cache Environment. Math. Programming B, 63, 371-387, (1994).
- G. Benedek and A. Itai, Nonuniform Learnability. J. Computer and Sys. Science, 48, 311-323, (1994).
- I. Dagan and A. Itai, Word Sense Disambiguation Using a Second Language Monolingual Corpus. Computational Linguistics, 20, 563-596 (1994).

- S. Ben-David, A. Itai and E. Kushilevitz, *Learning by Distances*. Information and Computation, 117(2), 240-250, (1995).
- R. Alur, A. Itai, R. Kurshan and M. Yannakakis, *Timing Verification by Successive Approximation*. Information and Computation, 118, 142-157, (1995).
- M. Levinger, U. Ornan and A. Itai. Morphological Disambiguation in Hebrew Using A Priori Probabilities. Computational Linguistics, 21, 383-404, (1995).
- A. Itai and H. Shachnai, Optimal Strategies for Source Routing in a Network with Dependent Paths. J. of Algorithms, 20, 218-243, (1996).
- N. Allenberg-Navony, A. Itai and S. Moran Average and Randomized Complexity of Distributed Problems. SIAM Journal on Computing, 6, 1254-1267, (1996).
- Ye. Dinitz, A. Itai and M. Rodeh, On an Algorithm of Zemlyachenko for Subtree Isomorphism, Information Processing Letters, 70(3), 141-146, (1999).
- 40. J. Gil and A. Itai, How to Pack Trees. Journal of Algorithms, 32, 108-132, (1999).
- 41. A. Efrat, A. Itai and M. Katz, *Improvements on Bottleneck Matching and Related Problems* Using Geometry. Algorithmica, 31, 1-28, (2001).
- 42. K. Sima'an, A. Itai, Y. Winter, A. Altman and N. Nativ. Building a Tree-Bank of Modern Hebrew Text. Traitment Automatique des Langues, 42, 347-380, (2001).
- A. Itai, M. Rodeh and H. Shachnai, The Passport Control Problem or How to Keep an Unstable Service System Load Balanced? Theoretical Computer Science, 282, 303-318, (2002).
- 44. A. Itai, *Producing Permutations and Combinations in Lexicographic Order*. Journal of the Brazilian Computer Society, 7, 65-68, (2002).
- 45. A. Gaysinsky, A. Itai and H. Shachnai, *Strongly Competitive Algorithms for Caching with Pipelined Prefetching*. Information Processing Letters Inf. 91(1): 19-27 (2004).
- 46. Alon Itai and Irit Katriel Canonical Density Control Inf. Process. Lett., 1046:195-199, (2007).
- 47. Alon Itai and Shuly Wintner, *Language Resources for Hebrew*. Language Resources and Evaluation, 42: 75-98, (2008).
- 48. Shai Gretz, Alon Itai, Brian MacWhinney, Bracha Nir and Shuly Wintner, *Parsing Hebrew CHILDES Transcripts*. To appear in Language Resources and Evaluation.
- 49. Hasan Al-Haj, Alon Itai and Shuly Wintner, *Lexical Representation of Multiword Expressions* in Morphologically-complex Languages. Journal of Lexicography, 27(2):130-170, June 2014.
- Hanna Fadida, Alon Itai and Shuly Wintner, A Hebrew Verb-Complement Dictionary. Language Resources and Evaluation, 48(2):249-278, June 2014.

Refereed Conferences:

1. S. Even and A. Itai, *Queues, Stacks and Graphs.* International Symposium on the Theory of Machines and Computations, Haifa, (1971).

- A. Itai, S. Even and A. Shamir, On the Complexity of Timetable and Multi-Commodity Flow. Switching and Automata Theory (now FOCS) (1975). (Preliminary version of journal paper (2)).
- 3. A. Itai and M. Rodeh, *Finding a Minimum Circuit in a Graph.* Switching and Automata Theory 1977 (now FOCS), Boulder, Colorado, (May 1977). (Preliminary version of journal paper (6)).
- 4. A. Itai and M. Rodeh, *Some Matching Problems.* ICALP 4, Helsinki, Finland, (July 1977), (a preliminary version of journal paper (5)).
- 5. A. Itai and M. Rodeh, *Covering a Graph by Circuits*. ICALP 5, Udine, Italy, (July 1978) 289-299 (a preliminary version of journal paper (12) containing some results not published elsewhere).
- A. Itai and M. Rodeh, Modified Binary Search Trees. ILA 1980 (also, TR # 182, Dept. of Computer Science, Technion, Haifa, Israel).
- A. Itai, A. G. Konheim and M. Rodeh, Sparse Tables O(log n) on the Average and O(log² n) in the Worst Case. ICALP 8, Acre, Israel, (July 1981).
- 8. A. Itai and M. Rodeh, *Probabilistic Methods for Breaking Symmetry in Distributive Networks.* Foundation of Computer Science (FOCS) 81, Nashville, Tenn. (Nov. 1981). (a preliminary version of some of the results of journal paper (25)).
- 9. A. Itai and M. Rodeh, *Scheduling Transmissions in a Network*. NetFlow 83, (March 1983), Pisa, Italy. (Preliminary version of journal paper (16)).
- 10. O. Shmueli and A. Itai, *Maintenance of Views*. SIGMOD (June 1984). (Preliminary version of some of the results of journal paper (20)).
- 11. A. Itai and M. Rodeh, *The Multi-Tree Approach to Reliability in Distributed Networks*. 25th Symposium on the Foundations of Computer Science, (Oct. 1984). (Preliminary version of journal paper (21)).
- 12. A. Itai, *Parallel Arithmetic with Concurrent Writes*. ACM Symp. on Principles of Distributed Computing, August 1985.
- R. Bar-Yehuda, O. Goldreich and A. Itai, On the Time Complexity of Broadcast in Radio Networks: an Exponential Gap between Determinism and Randomization. 6th Symposium on Principles of Distributed Computing, Vancouver, Canada, (Aug. 1987). (Preliminary version of journal paper (29).
- 14. G. Benedek and A. Itai, *Nonuniform Learnability*. ICALP 88, (July. 1988). (Preliminary version of journal paper (32).
- A. Itai, A. Lavie, U. Ornan and M. Rimon, On the Applicability of Two Level Morphology to the Inflection of Hebrew Verbs. ALLC June 1988, Jerusalem, (TR 513, CS Department Technion).
- 16. E. Odiz and A. Itai, *PREP A Detector of Style Errors in English.* ALLC June 1988, Jerusalem.

- G. Benedek and A. Itai, *Learnability by Fixed Distributions*. COLT 88, Cambridge, Mass., August 1988, (TR 468, Computer Science Department, Technion, Haifa). (Preliminary version of journal paper (26)).
- I. Dagan and A. Itai, A Set Expression Based Inheritance System. Bar-Ilan Symposium on the Foundations of Artificial Intelligence, June 1989. In Artificial Intelligence and Computer Vision, Y. A. Feldman, and A Bruckstein (ed.), Elsevier Science Publishers, B.V. (North-Holland), 1991. (Preliminary version of journal paper (27)).
- R. Bar-Yehuda, A. Israeli and A. Itai, *Multiple Communication in Multi-Hop Radio Networks*. 8th Symposium on Principles of Distributed Systems, Edmonton, Canada, (Aug. 1989). (Preliminary version of journal paper (30)).
- R. Bar-Yehuda, O. Goldreich and A. Itai, Efficient Emulation of Single-Hop Radio Network with Collision Detection on Multi-Hop Radio Network with no Collision Detection. 3rd International Workshop on Distributed Algorithms, Nice, France, September 1989. (Preliminary version of journal paper (28)).
- S. Ben-David, A. Itai and E. Kushilevitz, *Learning by Distances*. COLT '90, Rochester, New-York, August 1990. (Preliminary version of journal paper (34)).
- 22. I. Dagan and A. Itai, Automatic Acquisition of Constraints for the Resolution of Anaphora References and Syntactic Ambiguities. COLING '90, Helsinki, Finland, August 1990.
- 23. A. Itai, On the Computational Power needed to Elect a Leader. 4th International Workshop on Distributed Algorithms, Otranto, Italy, September 1990.
- 24. I. Dagan and A. Itai, A Statistical Filter for Resolving Pronoun Reference. Israel Conference on Artificial Intelligence, December 1990. In Artificial Intelligence and Computer Vision Y. A Feldman and A Bruckstein (ed.), Elsevier Science Publishers B.V. (1991).
- 25. I. Dagan, A. Itai and U. Schwall, *Two Languages are More Informative Than One.* ACL '91, Berkeley, Calif.
- 26. A. Itai, *The Communication Complexity of the Two List Problem*. 5th International Workshop on Distributed Algorithms, Delphi, Greece, October 1991.
- 27. S. Gal, Y. Hollander and A. Itai, *Optimal Mappings in a Direct Mapped Cache Environment*. ISTCS 1992, Haifa, Israel. (Preliminary version of journal paper (31)).
- R. Alur, A. Itai, R. Kurshan and M. Yannakakis, *Timing Verification by Successive Approx*imation. CAV, Montreal, Canada, June 1992. (Preliminary version of journal paper (35).)
- G. Benedek and A.Itai, *Dominating Distributions and Learnability*. COLT '92, Pittsburgh, Pennsylvania, July 1992.
- U. Ornan, M. Levinger and A. Itai, Morphological Disambiguation in Hebrew Using A Priori Probabilities. The 9-th Israeli Symposium on Artificial Intelligence and Computer Vision, Ramat Gan, Israel, Dec. 1992.
- 31. A. Itai and H. Shachnai, Optimal Strategies for Source Routing in a Network with Dependent Paths. ISTCS '93, Natania, Israel. (Preliminary version of journal paper (37).)

- 32. R. Bar-Yehuda, A. Efrat and A. Itai, A simple algorithm for maintaining the center of a planar point-set. 5th Canadian Conference on Computational Geometry, 1993.
- N. Allenberg-Navony, A. Itai and S. Moran Average and Randomized Complexity of Distributed Problems. 6th International Workshop on Distributed Algorithms, Holland, Sept. 1994. (Preliminary version of journal paper (38).)
- A. Itai, Learning Morphology Practice Makes Good. 2nd International Colloquium on Grammatical Inference, Alicante, Spain 1994.
- Y. Gil and A. Itai, *Packing Trees.* 3rd European Symposium on Algorithms, Corfu, Greece, 1995.
- 36. A. Efrat and A. Itai, *Improvements on Bottleneck Matching using Geometry*. The Twelfth Annual Symposium on Computational Geometry, Philadelphia, (June 1996). A preliminary version appeared as TR # 805 Computer Science Department, Technion, Haifa, (Sept. 1995).
- 37. A. Itai, M. Rodeh and H. Shachnai, *The Passport Control Problem or How to Keep an Unstable Service System Load Balanced*? FUN in Algorithms, Isla d'Elba, Italy, (1998).
- 38. Y. Gil and A. Itai, *The Complexity of Type Analysis of Object Oriented Programs*. European Conference on Object-Oriented Programming (ECOOP), Belgium, 1998.
- 39. Alexander Gaysinsky, Alon Itai and Hadas Shachnai, Strongly Competitive Algorithms for Caching with Pipelined Prefetching ESA 2001.
- 40. Alon Itai and Er'el Segal, A Corpus Based Morphological Analyzed for Unvocalized Modern Hebrew. Semitic Languages Workshop, MT Summit, New Orleans, 2003.
- 41. Alon Itai Yoad Winter and Shuly Wintner, A Computational Lexicon of Contemporary Hebrew. LREC 2006, Genoa, Italy.
- 42. Alon Itai, *Knowledge Center for Processing Hebrew*. Towards a Research Infrastructure for Language Resources Workshop, LREC 2006, Genoa, Italy.
- 43. Joseph (Yossi) Gil, Alexander Gorovoy and Alon Itai, *Software Fingerprinting*. International Conference on Information Technology: Research and Education. 2006.
- 44. Alon Itai and Michael Slavkin *Detecting Data Structures from Traces*. ECML Workshop on Inductive Programming, Warsaw, Poland, September 2007.
- Einav Itamar and Alon Itai Using Movie Subtitles for Creating a Large-Scale Bilingual Corpora. LREC 2008, Marrakech, Morocco, May 2008.
- 46. Fanica Gavril and Alon Itai, *Covering a tree by a forest*. Conference honoring Martin Golumbic's 60th birthday. Haifa, September 2008. To appear in the LNCS proceedings of the conference.
- Alon Itai. A Linguistic Search Tool for Semitic Languages. LREC Workshop on Semitic Languages, Malta, May 2010.
- Alon Itai and Gai Shaked. How to Pronounce Hebrew Names. ISCOL 2010. Tel-Aviv, June 2010.

49. Nitsan Chrisman and Alon Itai, *How to construct a multi-lingual domain ontology*. LREC, Reykjavík, 2014.

Technical Reports

- A. Itai and M. Rodeh, On Finding an Optimal Communication Spanning Tree. TR 110, Dept. of Computer Science, Technion-ITT, (Nov. 1977).
- A. Itai and A. G. Konheim and M. Rodeh, A Sparse Table Implementation of Sorted Lists (The Insertion Process). RC# 9146, Mathematical Sciences Dept., IBM-T. J. Watson Research Center, Yorktown Heights, (Sept. 1980), (this paper contains a precise mathematical analysis which does not appear in conference paper (7)).
- 3. A. Itai and J. Makowsky, On the Complexity of Herbrand's Theorem. TR 243, Computer Science Department, Technion, Haifa, (May 1982).
- A. Itai and A. Zehavi, On the Size of Non-Weakly-Linked Graphs. TR 295, Computer Science Department, Technion, Haifa, (Nov. 1983).
- 5. I. Dagan and A. Itai, Semantic Disambiguation in MT: A Prototype and its Consequences. TR # 548, Computer Science Department, Technion, Haifa, (April 1989).
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