

Curriculum Vitae

VICTOR W. MAREK

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PERSONAL DATA

US citizen.
Married, 2 children
Foreign Languages: French, Polish, Russian and Spanish.

RESEARCH INTERESTS

Logical Foundations of Artificial Intelligence, Constraint Satisfaction, Design of Databases and Knowledge Bases,

ACADEMIC TRAINING

1972	D.Sc., Warsaw University, Warszawa, Poland.
1968	Ph.D., Warsaw University, Warszawa, Poland.
1964	M.Sc., Warsaw University, Warszawa, Poland.

EMPLOYMENT HISTORY

July 1984-present	<i>Professor</i> , Department of Computer Science, University of Kentucky.
July 2001-June 2002	<i>Visiting Scholar</i> , Department of Mathematics, University of California, San Diego, CA.
March 1992- March 1995	<i>Research Associate</i> , Mathematical Sciences Institute, Cornell University, Ithaca, NY.
August 1989- August 1990	<i>Visiting Professor</i> , Mathematical Sciences Institute, Cornell University, Ithaca, NY.

August 1983- June 1984

Visiting Associate Professor, Department of Computer Science, University of Kentucky.

November 1982- August 1983

Research Professor, Venezuelan Institute of Scientific Investigations, Caracas, Venezuela.

INVITED TALKS

1. Constructivity in Logic and Applications, New York City, May 2012.
2. Harvey Friedman 60th Birthday Commemorative Conference, Columbus, OH, May 2009.
3. Joint Winter American Mathematical Society/Association of Symbolic Logic meeting, San Diego, CA, January 2008.
4. Logical Foundations of Computer Science, New York City, June 2007.
5. Trends in Logic III, Warsaw, Poland, September 2005.
6. New York Logic Colloquium, New York City, April 2002.
7. Tarski Centennial Conference, Banach International Mathematical Center, Warsaw, Poland, May 2001.
8. Nonmonotonic Reasoning, International Workshop, Breckenridge, CO, April 2000.
9. Course in Nonmonotonic Logic, XI Latin American Logic Colloquium, Merida, Venezuela, 1998.
10. Rough Sets and Current Trends in Computing Conference, Warsaw Poland, June 1998.
11. American Mathematical Society Annual Meeting, Special Session on Computable Mathematics and Its Applications, Baltimore, MD, January 1998.
12. Helena Rasiowa Memorial Days on Logic, Algebra and Computer Science, Warsaw, Poland, 1996.
13. CESA'96, Special Session on Intelligent Control via Hybrid Systems, Lille, France, 1996.
14. ASL Logic Colloquium, Haifa, Israel, 1995.
15. Third Kurt Gödel Symposium, Kurt Gödel Society, Brno, Czech Republic, 1993.
16. Symposium in honor of 65th birthday of J. Minker, University of Maryland, 1992.
17. Workshop on Inductive and Nonmonotonic Logic, NIL 91, Reinhardbrunn, Germany, 1991.
18. Workshop on Inductive and Nonmonotonic Logic, NIL 90, Karlsruhe, Germany, 1990.
19. Symposium on Mathematics and Artificial Intelligence, Special Session on Logic and Artificial Intelligence, Ft. Lauderdale, 1990.
20. Special course in UMIACS, University of Maryland, January 1990, "Five Lectures on Nonmonotonic Reasoning".
21. Symposium on Logic Programming: AAAS Annual Meeting, Boston 1988
22. ORSA Annual Meeting, Miami, 1986.
23. ASL Meeting, Notre Dame, IN, 1984.
24. ASL Logic Colloquium, Prague, Czechoslovakia, 1980.
25. Conference on Generalized Recursion Theory, Oslo, Norway, 1977.
26. Colloquium Higher Set Theory, Oberwolfach, Germany, 1977.
27. ASL Logic Colloquium, Oxford, U.K., 1976.
28. ASL Logic Colloquium, Orleans, France, 1972.

DISTINCTIONS

1. Prize for the best paper at EPIA 89.
2. Mathematics National Prize, CONICIT, Venezuela, 1980.
3. Sierpiński Prize of the Polish Mathematical Society, 1973.
4. Prize of the IIIrd Division of the Polish Academy of Science, 1973.

EDITING BOARDS

1. Fundamenta Informaticae
2. Open Mathematics (Central European Journal of Mathematics), Editorial Advisory Board
3. Journal of Applied Logic
4. Transactions on Rough Sets

ADDITIONAL SCIENTIFIC ACTIVITIES

1. Reviewing proposals for US Army Research Office, National Science Foundation, National Research Council, and other federal granting agencies.
2. Reviewing for Computing Reviews.
3. Refereeing numerous papers for: Artificial Intelligence Journal, Annals of Mathematics and Artificial Intelligence, Annals of Pure and Applied Logic, Fundamenta Informaticae, Journal of Logic Programming, Journal of Logic and Computation, Journal of Automated Reasoning and Journal of Symbolic Logic, et. al.
4. Invited lectures at numerous Universities, Government Laboratories and Industry including Cornell University, Harvard University, Stanford University, University of Texas at Austin, BRL, ARO, IBM Research etc.
5. Organizer of various scientific Symposia and Conferences (including a General Chair of International Symposium on Logic Programming, 1994 and 2011, and General Chair of International Conference on Logic Programming and Nonmonotonic Reasoning 1995).
6. Member of the American Association of Artificial Intelligence, Association of Symbolic Logic, and Kurt Gödel Society
7. Member, Committee for Polish National Prize for Young Computer Scientist, 2004-2005, 2007-2008, 2010-2012, 2014-2016.
8. Supervising 15 Ph. D. dissertations and more than 120 M.Sc. projects.

PATENTS

Computer Architecture and Process of Patient Generation, and Simulation for Computer Based Testing System (with R. Rovinelli, W. Sumner II, and M. Truszczynski). US Patent nos. 6,246,975, 6,978,244, 7,653,556.

CONSULTING

1. 2005 - 2007 Kestrel Institute, Palo Alto, CA.
2. 1992 - 1996 Automatization of Testing Program, American Board of Family Practice, Lexington, KY.
3. 1987 - 1988 Personal Service Contract, Battelle. Evaluating major software modification project for US Army Materiel Command.
4. 1985 - 1987 Participation in Distinguished Visitor in Artificial Intelligence Program in U.S. Environmental Protection Agency. Supervising several practical expert systems project related to environmental issues.
5. 1986 - 1987 Artificial Intelligence Program, Information System Division, IBM, Lexington, KY. Assistance in expert system development and logic programming education.

BOOKS

1. Introduction to Mathematics of Satisfiability. CRC Press, 2009. (republished as Introduction to Satisfiability, College Publications, 2014)
2. (With M. Truszczyński) Nonmonotonic Logic: Context-Dependent Reasoning, *Artificial Intelligence Series*, Springer-Verlag, 1993.
3. (With W. Lipski) Combinatorial Analysis, (in Polish), PWN 1983.
4. (With J. Onyszkiewicz) Elements of Logic and Foundations of Mathematics in Problems. Reidel Publishing, 1982 (had several editions, including paperback).
5. (With J. Onyszkiewicz) Elements of Logic and Foundations of Mathematics in Problems (in Polish) 1971-2010 (thirteen editions)

PAPERS

See notes after the list of publications for additional scientific, but not necessarily scholarly, writings.

1. Andrzej Mostowski, *European Mathematical Society Newsletter* 88, pp. 10-11, 2013.
2. (with D. Cenzer and J. Remmel) Index sets for Finite Normal Predicate Logic Programs, Arxiv:1303.6555, 2013.
3. (with A. Skowron et.al.) Professor Zdzisław Pawlak (1926-2006), Founder of Polish School of Artificial Intelligence, *Rough Sets and Intelligent Systems*, A. Skowron, ed., Springer Verlag, pages 2 – 56, 2013.
4. Zdzisław Pawlak, Databases and Rough Sets. In: *Rough Sets and Intelligent Systems*, A. Skowron, ed., Springer Verlag, pages 175 – 184, 2013.
5. (with J. Remmel) Disjunctive Programs with Set Constraints. In: "Logic-based Artificial Intelligence", essays to honor V. Lifschitz 65th birthday, E. Erdem, J. Lee, Y. Lierler, and D. Pearce editors, 2013.
6. (with S.A. Weaver, K.J. Ray, A.J. Mayer, and A.K. Walker) Satisfiability-based Set Membership Filter. *Journal of Satisfiability, Boolean Modeling and Computation* 8:129–148, 2012.
7. (with J. Remmel) An Application of Proof-Theory in Answer Set Programming. In: Neil

- Tennant, ed., *Foundational Adventures: Essays in Honor of Harvey M. Friedman*. Templeton Press (Online); and College Publications, London. (a short version published in *Proceedings of ICLP 2008*), 2011.
8. (with M. Denecker and M. Truszczyński) *Reiter's Default Logic Is a Logic of Autoepistemic Reasoning And a Good One, Too*. In: G. Brewka, V.M. Marek, and M. Truszczyński, eds. *Nonmonotonic Reasoning – Essays Celebrating its 30th Anniversary*, College Publications, 2011.
 9. (With I. Niemelä and M. Truszczyński) *The Origins of Answer Set Programming*. In: G. Brewka, V.M. Marek, and M. Truszczyński, eds. *Nonmonotonic Reasoning – Essays Celebrating its 30th Anniversary*, College Publications, 2011.
 10. (With J.B. Remmel) *Extensions of Answer Set Programming*. In: G. Brewka, V.M. Marek, and M. Truszczyński, eds. *Nonmonotonic Reasoning – Essays Celebrating its 30th Anniversary*, College Publications, 2011.
 11. (With J.B. Remmel) *Effectively Reasoning about Infinite Sets in Answer Set Programming*, Springer Lecture Notes in Computer Science 6565 (Papers to commemorate Michael Gelfond's 65th birthday, pages 131 – 147, 2011.
 12. (With J.B. Remmel) *Guarded Resolution for Answer Set Programming*, *Theory and Practice of Logic Programming* 11:11–123, 2010.
 13. (With J.B. Remmel) *The complexity of recursive constraint satisfaction problems*. *Annals of Pure and Applied Logic* 161:447–457, 2009
 14. (With J.B. Remmel) *Automata and Answer Set Programming*. In *Logical Foundations of Computer Science 2009*. Springer Lecture Notes in Computer Science 5407, pages 323–337, 2009.
 15. (With H.A. Blair and J.B. Remmel) *Set-based Answer Set Programming*. *Annals of Mathematics and Artificial Intelligence* 52:81–105, 2008.
 16. (With J.B. Remmel) *On the continuity of Gelfond-Lifschitz operator and other applications of proof-theory in Answer Set Programming*. In: *Proceedings of the International Conference on Logic Programming 2008*. Springer Lecture Notes in Computer Science 5306, pages 223–237, 2008.
 17. *Quo Vadis Answer Set Programming*. In: *Proceedings of the International Conference on Logic Programming 2008*. Springer Lecture Notes in Computer Science 5306, pages 83–87, 2008.
 18. (With I. Niemelä and M. Truszczyński) *Logic Programs with Monotone Abstract Constraint Atoms*. *Theory and Practice of Logic Programming*, 8:167–199, 2008
 19. (With M. Truszczyński) *Approximation Schemes in Logic and Artificial Intelligence*, *Transactions on Rough Sets* 9:135–144, 2008.
 20. (with J.B. Remmel) *Compactness Properties of Stable Semantics for Logic Programs*. In: *Proceedings of the Conference Logical Foundations of Computer Science 2007*, Springer Lecture Notes in Computer Science 4514, pages 379–400, 2007. Full version published in *Fundamenta Informaticae* 81:211–239, 2007.
 21. (With M. Truszczyński) *Rough Sets and Approximation Schemes*. *Proceedings of the Conference Rough Sets and Emerging Intelligent Systems Paradigms*, Springer Lecture Notes in Computer Science 4585, pages 22–28. 2007.
 22. *Characterizing Pawlak's Approximation Operators*, *Transactions on Rough Sets* 7:140–150, 2007.

23. (with R.A. Finkel and M. Truszczynski) Generating Cellular Puzzles with Logic Programs. Proceedings of IC-AI 2006, pages 403–407.
24. (with I. Pivkina and M. Truszczyński) Approximating answer sets of unitary Lifschitz-Woo programs. Logic Programming and Nonmonotonic Reasoning, Proceedings of the 8th International Conference, Springer Lecture Notes in Computer Science, 2005.
25. (with R.S. Boyer and W.J. Legato) Toward Automating the Discovery of Decreasing Measures. *Journal of Automated Reasoning* 35:355–371, 2005.
26. (with D. Cenzer and J.B. Remmel) Using logic programs to reason about infinite sets. *Annals of Mathematics and Artificial Intelligence*, 44:309–339, 2005.
27. (with M. Truszczyński) Logic programs with abstract constraint atoms. *Proceedings of the 19th National Conference on Artificial Intelligence (AAAI-04)*, pages 86–91, AAAI Press, 2004.
28. (with H. Ponnuru, R. Finkel and M. Truszczynski) Automatic Generation of English-language Steps in Puzzle Solving. *Proceedings of the International Conference on Artificial Intelligence 2004*, H.R. Arabnia, editor, pages 437–442, 2004.
29. (with R. Finkel and M. Truszczyński) Constraint Lingo: Towards high-level constraint programming. *Software: Practice and experience* 34(15):1481–1504, 2004.
30. (with J.B. Remmel) Answer Set Programming with Default Logic. Proceedings of the 10th International Workshop on Nonmonotonic Reasoning, pages 276–284, 2004.
31. (with M. Denecker and M. Truszczyński) Ultimate approximation and its applications in nonmonotonic knowledge representation systems. (complete version of the KR’2002 paper). *Information and Computation* 192:84–121, 2004.
32. (with M.R. Dransfield L. Liu and M. Truszczynski) Satisfiability and Computing van der Waerden Numbers, (extended version of SAT 2003 paper), *Electronic Journal of Combinatorics* 11(1):R41, 2004.
33. (with Z. Lonc) Quorum Constraints and Filters in Boolean Lattices. *Journal of Combinatorial Mathematics and Combinatorial Computing* 48:115–137, 2004.
34. (with M.R. Dransfield and M. Truszczynski) Satisfiability and Computing van der Waerden Numbers. Theory and Applications of Satisfiability Testing. 6th International Conference, Selected Revised Papers. E. Giunchiglia and A. Tacchella (eds.) Springer Lecture Notes in Computer Science 2919, pages 1–13, 2004.
35. (with D. Cenzer and J.B. Remmel), Using logic programs to reason about infinite sets. Proceedings of the 8th Symposium on Mathematics and Artificial Intelligence, 2004
36. (with H.A. Blair, J.B. Remmel and A. Riviera), Set-based Logic Programming. Proceedings of the Fourth Workshop Computational Logic and Multi-Agent Systems, 2004
37. (with J.B. Remmel) Set Constraints in Logic Programming. Logic Programming and Nonmonotonic Reasoning, Proceedings of the 7th International Conference, V. Lifschitz and I. Niemelä, (eds.) Springer Lecture Notes in Computer Science 2923, pages 154–167, 2004.
38. (With I. Niemelä and M. Truszczynski) Logic programs with monotone cardinality atoms. Logic Programming and Nonmonotonic Reasoning, Proceedings of the 7th International Conference, V. Lifschitz and I. Niemelä, (eds.) Springer Lecture Notes in Computer Science 2923, pages 168–179, 2004.
39. (with M.R. Dransfield and M. Truszczynski) Satisfiability and the computation of van der Waerden numbers. Onsite Proceedings of SAT-03.
40. (with J.B. Remmel) On the expressibility of stable logic programming, *Theory and Practice*

- of Logic Programming* 3(4,5) pages 551-567, 2003.
41. (with M. Denecker and M. Truszczyński) Uniform semantic treatment of default and autoepistemic logics. (Full version of the extended abstract published in KR2000). *Artificial Intelligence Journal*. 143:79–122, 2003.
 42. (With R.A. Finkel and M. Truszczyński) Constraint Lingo: A Program for Solving Logic Puzzles and Other Tabular Constraint Problems. *Logics in Artificial Intelligence. Proceedings of 8th European Conference, JELIA 2002*. Springer Lecture Notes in Computer Science 2424, pages 513–516, 2002.
 43. (with J.B. Remmel) On logic programs with cardinality constraints. *Proceedings of the 9th International Workshop on Non-Monotonic Reasoning*, pp. 219–228, 2002.
 44. (with M. Denecker and M. Truszczyński) Ultimate approximations in nonmonotonic knowledge representation systems. *Principles of Knowledge Representation and Reasoning, Proceedings of the Eight International Conference*, pages 177–188, Morgan-Kaufmann, 2002.
 45. (with I. Pivkina and M. Truszczyński), Annotated Revision Programs, *Artificial Intelligence Journal*, 138, pages 149–180, 2002.
 46. (With J. Mycielski) Foundations of Mathematics in the Twentieth Century. *The American Mathematical Monthly* 108(5):449–468, 2001.
 47. (With J.B. Remmel) On the Expressibility of Stable Logic Programming. *Logic Programming and Nonmonotonic Reasoning, Proceedings of the 6th International Conference*, T. Eiter, G. Pfeifer, and M. Truszczyński (eds.) Springer Lecture Notes in Computer Science 2173, pages 107–120, 2001.
 48. (With M. Denecker and M. Bruynooghe) Logic Programming Revisited: Logic Programs as Inductive Definitions. *ACM Transactions on Computational Logic* 2(4):623–654, 2001.
 49. (with H.A. Blair and J.B. Remmel) Spatial Logic Programming, In: *Proceedings of 5th World Multiconference on Systems, Cybernetics and Informatics, 2001, Orlando, FL, Volume XVII, Cybernetics and Informatics: Concepts and Applications (Part II)*, pp. 212-218.
 50. (With R.A. Finkel and M. Truszczyński) Tabular Constraint-Satisfaction Problems and Answer Set Programming. In: *Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning*, AAAI Press, Palo Alto, CA, pages 65–71, 2001.
 51. (With R.A. Finkel, N. Moore and M. Truszczyński) Computing Stable Models in Parallel. In: *Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning*, AAAI Press, Palo Alto, CA, pages 72–76, 2001.
 52. (With J.B. Remmel) On the Foundations of Answer Set Programming. In: *Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning*, AAAI Press, Palo Alto, CA, pages 124–131, 2001.
 53. (with J. Engelfriet, J. Treur and M. Truszczyński), Default Logic and Specification of Nonmonotonic Reasoning. *Journal of Experimental and Theoretical Artificial Intelligence* 13, pages 99–112. 2001.
 54. (with M. Denecker and M. Truszczyński) Approximations, stable operators, well-founded fixpoints and applications in nonmonotonic reasoning, In: J. Minker, editor: *Logic-Based Artificial Intelligence*, pages 127–144, Kluwer Academic Publishers, 2000.
 55. (with M. Denecker and M. Truszczyński) Uniform semantic treatment of default and autoepistemic logics, *Principles of Knowledge Representation and Reasoning, Proceedings of the Seventh International Conference*, pages 74–84, Morgan-Kaufmann, 2000.
 56. (with P. Cholewinski, A. Mikitiuk, and M. Truszczyński) Computing with Default Logic,

- Artificial Intelligence Journal* 112:105–146, 1999.
57. (with M. Truszczyński) Contributions to the Theory of Rough Sets, *Fundamenta Informaticae* 39(4):389–409, 1999.
 58. (with I. Pivkina and M. Truszczyński), Annotated Revision Programs, Logic Programming and Nonmonotonic Reasoning, Proceedings of the 5th International Conference, M. Gelfond, N. Leone, and G. Pfeifer (eds.) Springer Lecture Notes in Computer Science 1730, pages 49–62, 1999.
 59. (With A. Nerode and J. Remmel), Logic Programs, Well-orderings, and Forward Chaining, *Annals of Pure and Applied Logic* 96:231–276, 1999 (A full and extended archival publication of the paper from Yaroslavl volume).
 60. (with X. Qiu, L.V. Brown, S. Parameswaran, G.S. Ibbott, and S.I. Lai-Fook), Effect of Hyaluronidase on Albumin Diffusion in Lung Intersternum. *Lung* 177:273–288, 1999.
 61. (with M. Denecker and M. Truszczyński), Fixpoint 3-valued semantics for autoepistemic logic. Festschrift in honor of R. Reiter. Springer-Verlag. H.J. Levesque and F. Pirri (eds.), pages 113–136, 1999.
 62. (with M. Truszczyński), Stable logic programming - an alternative logic programming paradigm. In: 25 years of Logic Programming Paradigm, pages 375–398. Springer-Verlag, 1999.
 63. (with I. Pivkina and M. Truszczyński), Revision programming = logic programming + constraints, Proceedings of the Computer Science Logic Conference (CSL 98), Brno, Lecture Notes in Computer Science, 1584. pages 73–89. Springer-Verlag, 1999.
 64. (with D. Cenzer and J. B. Remmel), Index Sets for Finite Predicate Logic Programs, FLOC’99 Workshop on “Complexity-theoretic and Recursion-theoretic methods in Databases, Artificial Intelligence and Finite Model Theory”, 72–80, 1999.
 65. (With W.W. Koczkodaj and M. Orłowski) Myths about Rough Set Theory. *Communications of the ACM* 41(11):102–103, 1998.
 66. (With W. Sumner II and M. Truszczyński) Simulating patients with Parallel Health States. Proceedings of the American Medical Informatics Association 1998 Annual Symposium, Orlando, Florida, 1998 pages 438–442, 1998.
 67. (With M. Denecker and M. Truszczyński) Fixpoint 3-valued semantics for autoepistemic logic. Proceedings of AAI-98, pages 840–845.
 68. (with M. Truszczyński) Rough sets – what are they about? Lecture Notes in Computer Science, 1424, p. 24, 1998.
 69. (With B.F. Burton) Applications of JAVA programming language to database management, *SIGMOD Record* 27(1):27–34, 1998.
 70. (with M. Truszczyński) Revision programming. *Theoretical Computer Science* 190(2):241–277, 1998. This is a complete and extended archival publication of the ICDT95 and JELIA94 papers.
 71. (With A. Nerode and J. Remmel) Complexity of Recursive Normal Default Logic. *Fundamenta Informaticae* 32(2):139–148, 1997. (A full and extended archival publication of the LiCS 1995 paper).
 72. (With J. Treur and M. Truszczyński) Representation Theory for Default Logic. *Annals of Mathematics and Artificial Intelligence* 21(2-4):343–358, 1997.
 73. (with A. Nerode and J.B. Remmel) Basic forward chaining construction for logic programs. Lecture Notes in Computer Science, 1234, Logical Foundations of Computer Science’ 97, Logic at Yaroslavl, pages 214–225, Springer-Verlag, 1997.

74. (with J. Oldham and M. Truszczyński), Intelligent Computation of Presentation Documents Lecture Notes in Artificial Intelligence, 1325, Foundations of Intelligent Systems, Proceedings of ISMIS-97, pages 560–569, Springer-Verlag, 1997.
75. (With A. Nerode and J. Remmel) Nonmonotonic Rule Systems with recursive sets of restraints. *Archiv für Mathematische Logik* 36:339–384, 1997.
76. (with P. Cholewiński and M. Truszczyński), Default Reasoning System DeReS, Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning, L. Carlucci Aiello, J. Doyle and S. Shapiro, (eds.), KR’96, pages 518–528, 1996.
77. (With J. Engelfriet, J. Treur and M. Truszczyński) Infinitary Default Logic for Specification of Nonmonotonic Reasoning, in: J.J. Alferes, L.M. Pereira, and E. Orłowska (eds.), Logics in Artificial Intelligence, Proceedings European Workshop on Logics in Artificial Intelligence, JELIA’96, Lecture Notes in Artificial Intelligence vol. 1126, Springer-Verlag, pages 224–236, 1996.
78. (With L. Polkowski and A. Skowron) To the memory of Prof. Helena Rasiowa. *Fundamenta Informaticae* 28(3-4):i–ii, 1996.
79. (With A. Jankowski, E. Orłowska and A. Skowron) Cecylia Rauszer (1942–1994). (Polish) *Wiadomości Matematyczne* 32:67–182, 1996.
80. (With W. Sumner II and M. Truszczyński) Creating Evolution Scenarios for Hybrid Systems Proceedings of IEEE-SMC Symposium on Control, Optimization and Supervision, at CESA96, Lille, pages 512–516, 1996.
81. (With J. Dix and G. Gottlob) Reducing Disjunctive to Non-Disjunctive Semantics by Shift-Operations. *Fundamenta Informaticae* 27(1-2):87-100, 1996.
82. (With A. Nerode and J. Remmel) On the complexity of abduction. Proceedings of 11th Annual IEEE Symposium on Logic in Computer Science, pages 513–522. IEEE Computer Society Press, 1996.
83. (With W. Sumner and M. Truszczyński) A Formal Model of Family Medicine, *Journal of American Board of Family Practice* 9:41-52, 1996.
84. (With J. Oldham) Toward Intelligent Representation of Database Content. Proceedings of International Symposium on Methodologies of Intelligent Systems 1996, Z.W. Ras, M. Michalewicz, editors, pages 274–284, Springer Lecture Notes in Computer Science 1079, 1996.
85. (With W. Brooks and M. Truszczyński) Algorithms for maintenance of authorization bases, Proceedings of 2nd International Conference on Object-Oriented Information Systems, OOIS95, Springer Verlag, pages 99–110, 1995.
86. (With A. Nerode and J. Remmel) Complexity of normal default logic and related modes of nonmonotonic reasoning, Proceedings of 10th Annual IEEE Symposium on Logic in Computer Science, pages 178–187, 1995.
87. (With A. Nerode and J. Remmel) On logical constraints in logic programming. Proceedings of Logic Programming and Nonmonotonic Reasoning LPNMR95, Springer Lecture Notes in Computer Science 928, pages 43–56, 1995.
88. (with P. Cholewiński, A. Mikitiuk, and M. Truszczyński) Experimenting with nonmonotonic reasoning, Proceedings of Twelfth International Conference on Logic Programming, pages 267–281, MIT Press, 1995.
89. (with M. Truszczyński) Revision programming, database updates and integrity constraints. Proceedings of International Conference on Database Theory ICDT95, Springer Lecture Notes in Computer Science 893, pages 368–382, 1995.

90. (With H. Blair and J. Schlipf) The expressiveness of locally stratified programs, *Annals of Mathematics and Artificial Intelligence* 15(2):209–229, 1995.
91. (With A. Rajasekar and M. Truszczyński) Complexity of computing with extended propositional logic programs, *Annals of Mathematics and Artificial Intelligence* 15(3-4):357–378, 1995.
92. (with J. Dix and G. Gottlob) Causal models of disjunctive logic programs. Proceedings of International Conference on Logic Programming ICLP 94. pages 290–302, MIT Press, 1994.
93. (with M. Truszczyński) Revision specifications by means of programs. Proceedings of JELIA94, European Workshop on Logics for Artificial Intelligence. Springer Lecture Notes in Computer Science 838, pages 122–136, 1994.
94. (With A. Nerode) Nonmonotonic Reasoning, Encyclopedia of Computer Science and Technology. vol. 34, pages 281–289, Marcel Dekker, 1994.
95. (With A. Nerode and J. Remmel) A Context for Belief Revision: Forward Chaining-Normal Nonmonotonic Rule Systems, *Annals of Pure and Applied Logic* 67(1-3):269–323, 1994.
96. (With A. Nerode and J. Remmel) The stable models of a predicate logic program. *Journal of Logic Programming* 21(3):129–154, 1994. An extended abstract appeared in: Proceedings of Joint International Conference and Symposium on Logic Programming, Washington, DC, pages 446–460, 1992.
97. (With M. Truszczyński) Reflexive Autoepistemic Logic and Logic Programming, Logic Programming and Non-monotonic Reasoning, L.M. Pereira, A. Nerode (Eds.), MIT Press, pages 115–131, 1993.
98. (With H. Rasiowa) Mechanical Proof Systems for Logic II, Consensus Programs and Their Processing, *Journal of Intelligent Information Systems* 2:149–164, 1993. Extended abstract appeared in: Proceedings of International Symposium on the Methodology of Intelligent Systems, Trondheim 1993, Springer Lecture Notes in Computer Science, 1993.
99. (With M. Truszczyński) Normal form results for default logic, Nonmonotonic and Inductive Logic II, G. Brewka, K.P. Jandtke, P.H. Schmitt (Eds.) Springer Lecture Notes in Computer Science 659, pages 270–283, 1993.
100. (With G. Schwartz and M. Truszczyński) Modal nonmonotonic logics: ranges, characterization, computation. *Journal of the A.C.M.* 40:963–990, 1993. An extended abstract appeared in: Principles of Knowledge Representation and Reasoning. Proceedings of the International Conference on Knowledge Representation, KR91, pages 395–404, 1991.
101. (With M. Truszczyński) More on modal aspects of default logic, *Fundamenta Informaticae* 17(1-2):99–116, 1992.
102. (With A. Nerode and J. Remmel) How complicated is the set of stable models of a recursive logic program? *Annals of Pure and Applied Logic* 56(1-3):119–135, 1992.
103. (With M. Fitting and M. Truszczyński) The pure logic of necessitation. *Journal of Logic and Computation* 2(1-3):349–373, 1992.
104. (With V.S. Subrahmanian) Relationship between stable, supported, default, and autoepistemic semantics for general logic programs. *Theoretical Computer Science* 103(2):365–386, 1992.
105. (With A. Nerode and J. Remmel) A Theory of Nonmonotonic Rule Systems II, *Annals of Mathematics and Artificial Intelligence* 5(2-4):229–263, 1992. An extended abstract of this paper has been published in the Proceedings of the Fifth Symposium “Logic in Computer Science”, Philadelphia 1990, IEEE Press, pages 79–94, 1990.

106. (With M. Truszczyński) Autoepistemic Logic, *Journal of A.C.M.* 38(3):588–619, 1991.
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ADDITIONAL SCIENTIFIC ACTIVITIES

I was a co-editor of the volume “ Foundational Studies, Andrzej Mostowski” (and contributed two papers of non-scientific nature), IOS, 2008. I co-edited a volume devoted to Andrzej Grzegorzczuk, published by IOS same year. I was a co-editor of the ”Foundational Studies: selected works” of Andrzej Mostowski (North Holland, Studies in Logic and Foundations of Mathematics, vol. 93) and contributed an introductory text in that collection. I was an editor of several Special Issues of various journals. This includes an issue on Nonmonotonic Logic of “Fundamenta Informaticae”, an

issue on Nonmonotonic Logic of “Methods of Logic in Computer Science”, an issue of “Transactions on Rough Sets” and an issue on Nonclassical Logic in Computer Science of “Annals of Mathematics and Artificial Intelligence”. Here are few highlights of additional activities:

- I was an editor of several volumes in Springer Lecture Notes, both in Computer Science and Mathematics series.
- I was an editor of two volumes in the series of ”Logic programming and nonmonotonic reasoning” (1 and 3).
- I was and editor of (and contributor to) “Small encyclopedia of logic”, Zakład Narodowy im. Ossolinskich, 1970 and 1988.
- I was an associate editor of “Handbook of Recursive Mathematics”, published by Elsevier, 1998, 2 volumes.
- I translated into Polish R.C. Lyndon’s “Notes on Logic”. Van Nostrand, 1967. (Polish edition data: “O logice matematycznej”, PWN, Warszawa 1968.)
- I published a number of popular papers, mostly on mathematical logic, in a journal *Delta* devoted to popularization of Mathematics and computer Science.
- Using Artificial Intelligence techniques I produced and published two books of puzzles - variations of Sudoku (coauthored by R. Finkel and M. Truszczynski).