

## V. SCHOLARLY ACTIVITIES

### A. 1. Published Books (Appendix V. A1)

1. J. Geller, H. Kitano and C. B. Suttner (editors), *Parallel Processing for Artificial Intelligence 3*, 1997, 245 pages.

### 2. Published Book Chapters (Appendix V. A2)

**Note: In this Section a superscript <sup>ST</sup> indicates a student or former student of the NJIT CIS Department.**

1. Yugyung Lee<sup>ST</sup> and J. Geller, Component-based System for Building Collaborative and Sharable Learning Environment, *Advances in Web-Based Learning: First International Conference, ICWL 2002*, Hong Kong, China, published as LNCS 2436, Jianting Zhang, Le Gruenwald, Chris Candler, Gary McNutt, Wei Shung Chung (editors), Springer Verlag, New York, 2002, pp. 203–215.
2. J. Geller, Y. Perl, L. Liu, C. Rush and M. Halper, The importance of ownership for E-Commerce, in: *Semantic issues in E-commerce Systems, IFIP TC2/WG2.6 Ninth Working Conference on Database Semantics*, Robert Meersman, Karl Aberer, Tharam Dillon, Editors, Kluwer, Boston, 2003, pp. 311-326.  
J. Geller, AI Progress, Massive Parallelism and Humility, *Mind Versus Computer*, M. Gams, M. Paprzycki and X. Wu (editors), IOS Press, Washington DC, 1997, 9-19.
3. E. Lee<sup>ST</sup> and J. Geller, Parallel Operations on Class Hierarchies with Double Strand Representation, *Parallel Processing for Artificial Intelligence 3*, J. Geller, H. Kitano and C. B. Suttner (editors), North-Holland Elsevier, 1997, 69-94.
4. James Geller, Advanced Update Operations in Massively Parallel Knowledge Representation, *Massively Parallel Artificial Intelligence*, Hiroaki Kitano and James Hendler (editors), AAAI/MIT Press, 1994 74-101.
5. James Geller, Inheritance Operations in Massively Parallel Knowledge Representation, *Parallel Processing for Artificial Intelligence*, L. Kanal, V. Kumar, H. Kitano and C. Suttner (editors), Elsevier Science Publishers B.V., Amsterdam, 1993, 95-113.
6. J. Geller, Order Dependence of Declarative Knowledge Representation, *Current Trends in SNePS – Semantic Network Processing System*, D. Kumar (editor),

- Lectures Notes in Artificial Intelligence, **437**, Springer Verlag, NY, 1990, 41-54.
7. J. Geller, Entries for ADVICE TAKER, ELIZA, EPAM, HACKER, INTELLECT, LOGO, MICROPLANNER, OPS-5, SCHOLAR, SHRDLU, SIMULA, SMALLTALK, SNePS, SNOBOL-4, STUDENT, *Encyclopedia of Artificial Intelligence* S.C. Shapiro (editor), John Wiley & Sons, New York, 1987.
  8. S.C. Shapiro and J. Geller, Artificial Intelligence and Automated Design, *Computability of Design*, Y.E. Kalay (editor), John Wiley & Sons, New York, 1987, 173-187. Appeared previously as: S.C. Shapiro and J. Geller, Artificial Intelligence and Automated Design, *1986 SUNY Buffalo Symposium on CAD: The Computability of Design*, A.C. Harfmann, Y.E. Kalay, B.R. Majkowski, and L. M. Swerdloff (editors), SUNY at Buffalo, December 1986.

B. 1. Published Refereed Journal Papers (Appendix V. B1)

**Note: In this Section, a superscript <sup>ST</sup> indicates a student or former (graduated) student of the NJIT CIS Department.**

**Note: In this Section, a superscript <sup>st</sup> indicates a student of another university.**

1. Huanying Gu<sup>ST</sup>, Yehoshua Perl, Michael Halper<sup>ST</sup>, James Geller and Erich J. Neuhold, Contextual Partitioning for Comprehension of OODB Schemas, *KAIS* **6**(3), May 2004, pp. 315–344 (peer).
2. L. Wookey and J. Geller, Semantic Hierarchical Abstraction of Web Site Structures for Web Searchers, *Journal of Research and Practice in Information Technology* **36**(1), pp. 71-82, February 2004 (peer).
3. Li Zhang<sup>ST</sup>, Yehoshua Perl, Michael Halper<sup>ST</sup>, James Geller, and James J. Cimino, An Enriched Unified Medical Language System Semantic Network with a Multiple Subsumption Hierarchy, *JAMIA* **11**(3):195-206, 2004 (peer).
4. James Geller, Yehoshua Perl and Jintae Lee, Guest Editors' introduction to the special issue on Ontologies: Ontology Challenges: A Thumbnail Historical Perspective, *Knowledge and Information Systems*, **6**(4), pp. 375–379, July 2004 (editor).
5. Li Zhang<sup>ST</sup>, Yehoshua Perl, Michael Halper<sup>ST</sup> and James Geller, Designing metaschemas

- for the UMLS enriched semantic network, *Journal of Biomedical Informatics*, **36**(6), 433-449, December 2003 (peer).
6. Yehoshua Perl and James Geller, Guest Editors' introduction to the special issue: Research on structural issues of the UMLS—past, present, and future, *Journal of Biomedical Informatics*, **36**(6), 409-413, December 2003 (editor); Special Issue: pp. 409-517.
  7. Michael Halper<sup>ST</sup>, Li-min Liu<sup>ST</sup>, James Geller, Yehoshua Perl, Frameworks for incorporating semantic relationships into object-oriented database systems, *Concurrency and Computation: Practice and Experience* **15**, Issue 15, pp. 1337-1362, December 2003 (peer).
  8. Li-min Liu<sup>ST</sup>, James Geller and Yehoshua Perl, Enhancing OODB semantics to support browsing in an OODB vocabulary representation, *Concurrency and Computation: Practice and Experience*, **15**(9), August 2003, pp. 845–869 (peer).
  9. Yugyung Lee<sup>ST</sup> and James Geller, A Collaborative and Sharable Web-based Learning System, *Association for the Advancement of Computing in Education (AACE)*, **2**(2), 2003, pp. 35–45 (peer).
  10. Yugyung Lee<sup>ST</sup>, Markus Junginger<sup>st</sup>, and James Geller, High Performance Publisher/Subscriber Communication for Adaptive, Collaborative Web-Based Learning, *International Journal of Distance Education Technologies* **1**(3), July 2003, pp. 14–27 (peer).
  11. Yehoshua Perl, Zong Chen<sup>ST</sup>, Michael Halper<sup>ST</sup>, James Geller, Li Zhang<sup>ST</sup> and Yi Peng<sup>ST</sup>, The cohesive metaschema: a higher-level abstraction of the UMLS Semantic Network, *Journal of Biomedical Informatics*, **35**(3), June 2003, pp. 194–212 (peer).
  12. James Geller, Huanying Gu,<sup>ST</sup> Yehoshua Perl and Michael Halper <sup>ST</sup>, Semantic refinement and error correction in large terminological knowledge bases, *Data & Knowledge Engineering*, **45**(1), 2003, pp. 1–32, (peer).
  13. R. Scherl and J. Geller, Global Communities, Marketing and Web Mining, *Journal of Doing Business Across Borders*, **1**(2), pp. 141-150, 2002, <http://www.newcastle.edu.au/journal> (peer).
  14. Yugyung Lee<sup>ST</sup> and James Geller, Efficient Transitive Closure Reasoning in a Combined Class/Part/Containment Hierarchy, *Knowledge and Information Sys-*

- tems*, 4(3), pp. 305–328, July 2002, (peer).
15. Z. Chen<sup>ST</sup>, Y. Perl, M. Halper<sup>ST</sup>, J. Geller, H. Gu<sup>ST</sup>, Partitioning the UMLS Semantic Network, *IEEE Transactions on Information Technology in Biomedicine*, 6(2), pp. 102-108, 2002, (peer).
  16. J. Geller, Y. Perl, M. Halper<sup>ST</sup>, Z. Chen<sup>ST</sup> and H. Gu<sup>ST</sup>, Evaluation and Application of a Semantic Network Partition, *IEEE Transactions on Information Technology in Biomedicine*, 6(2), pp. 109-115, 2002, (peer).
  17. H. Gu<sup>ST</sup>, Y. Perl, M. Halper<sup>ST</sup>, J. Geller, F. Kuo<sup>ST</sup> and J. J. Cimino, Partitioning an Object-Oriented Terminology Schema, *Methods in Medical Informatics*, 40, 2001, pp. 204-212, (peer).
  18. Li-min Liu<sup>ST</sup>, Michael Halper<sup>ST</sup>, James Geller and Yehoshua Perl, Using OODB Modeling to Partition a Vocabulary into Structurally and Semantically Uniform Concept Groups, *IEEE Transactions on Knowledge and Data Engineering*, 14(4), pp. 850-866, 2002, (peer).
  19. H. Gu<sup>ST</sup>, Y. Perl, J. Geller, M. Halper<sup>ST</sup>, L. Liu and J. J. Cimino, Representing the UMLS as an OODB: Modeling Issues and Advantages, *Journal of the American Medical Informatics Association*, 7(1), January 2000, pp. 66-80 (peer).
  20. J. Geller and F. Lochovsky (editors), Special Issue of the International Journal for Intelligent and Cooperative Information Systems (IJICIS): Cooperative Information Systems – 98, 8(2&3), pp. 83-220, June & September (combined issue) 1999.
  21. H. Gu<sup>ST</sup>, M. Halper<sup>ST</sup>, J. Geller, and Y. Perl, Benefits of an Object-oriented Database representation for Controlled Medical Terminologies, *Journal of the American Medical Informatics Association*, 6(4), 283-303, July 1999, (peer).
  22. L. Liu<sup>ST</sup>, M. Halper<sup>ST</sup>, J. Geller, and Y. Perl. Controlled vocabularies in OODBs: Modeling issues and implementation. *Distributed and Parallel Databases*, 7(1), 37-65, January 1999, (peer).
  23. H. Gu<sup>ST</sup>, Y. Perl, J. Geller, M. Halper<sup>ST</sup> and M. Singh, A methodology for Partitioning a Vocabulary Hierarchy into Trees, *Artificial Intelligence in Medicine*, 15 77-98, 1999, (peer).
  24. James Geller and Rose Dios, A low-tech, hands-on approach to teaching sorting algorithms to working students. *Computers and Education*, 11, 1998, 89-103

- (peer).
25. Michael Halper<sup>ST</sup>, James Geller, Yehoshua Perl, An OODB Part-Whole Model: Semantics, Notation, and Implementation *Data & Knowledge Engineering*, **27**(1), 1998, 59-95, (peer).
  26. Ashish Mehta<sup>ST</sup>, James Geller, Yehoshua Perl, Erich Neuhold, The OODB Path-Method Generator (PMG) using Access Weights and Precomputed Access Relevance, *VLDB Journal*, **7**(1), February 1998, 25-47, (peer).
  27. A. Mehta<sup>ST</sup>, J. Geller, Y. Perl and P. Fankhauser, Computing Access Relevance for Path-Method Generation in OODBs and IM-OOB, *Journal of Intelligent Information Systems*, **7**(1), 1996, 75-100, (peer).
  28. N.R. Adam, A. Gangopadhyay, and J. Geller, Design and Implementation of a Knowledge-Based Query Processor, *International Journal of Intelligent and Cooperative Information Systems*, **2**(2), 1993, 107-125, (peer).
  29. J. Geller, Y. Perl, P. Cannata, A. Sheth, and E.J. Neuhold, Structural Integration: Concepts and Case Study, *Journal of Systems Integration*, 1993, **3**(2), 131-161, (peer).
  30. J. Geller, Y. Perl, E. Neuhold, and A. Sheth, Structural Schema Integration with Full and Partial Correspondence using the Dual Model, *Information Systems*, **17** (6) 1992, 443-464, (peer).
  31. J. Geller, Y. Perl, and E. Neuhold, Structure and Semantics in OODB Class Specifications, *SIGMOD Record Special Issue: Semantic Issues in Multidatabase Systems*, **20**(4), 1991, 40-43, (peer).
  32. J. Geller and C.Y. Du<sup>ST</sup>, Parallel Implementation of a Class Reasoner, *Journal for Experimental and Theoretical Artificial Intelligence*, **3**, 1991, 109-127, (peer).
  33. J. Geller, Propositional Representation for Graphical Knowledge, *International Journal of Man-Machine Studies*, **34**, 1991, 97-131, (peer).
  34. W. Fiala and J. Geller, Specific Coil Noise Induced by Magnetic Matter at Phase Transition Temperature, *Physics Letters* **77A**(5) June 1980, 350-352, (peer).
2. Published Refereed Conference Papers (Appendix V. B2)

**Note: In this Section a superscript <sup>ST</sup> indicates a student or former student**

of the NJIT CIS Department.

**Note: In this Section, a superscript <sup>st</sup> indicates a student of another university.**

1. Yugyung Lee<sup>ST</sup>, Chintan Patel<sup>st</sup>, Soon Ae Chun, and James Geller, Towards Intelligent Web Services for Automating Medical Services Composition, *Proceedings of 2004 IEEE International Conference on Web Services (ICWS 2004)*, San Diego, July 6-9, 2004, pp. 384–391 (peer).
2. Yugyung Lee<sup>ST</sup>, Chintan Patel<sup>st</sup>, Soon Ae Chun, and James Geller, Compositional Knowledge Management for Medical Services on Semantic Web, Alternate Track and Posters of the Thirteenth International World Wide Web Conference, (WWW 2004), May 17-22 2004, New York, NY, pp 498-499 (peer).
3. Soon Ae Chun, Yugyung Lee<sup>ST</sup> and James Geller, Ontological and Pragmatic Knowledge Management for Web Service Composition, *Proceedings of the 9th International Conference on Database Systems for Advanced Applications (DAS-FAA 2004)*, Jeju Island, Korea, March 17-19, 2004, published as *Lecture Notes in Computer Science 2973*, Springer-Verlag 2004, ISBN 3-540-21047-4, pp. 365-373, (peer).
4. Edwin Portscher<sup>ST</sup>, James Geller and Richard Scherl, Using Internet Glossaries to Determine Interests from Home Pages, Proceedings of the 4th International Conference, EC-Web, Prague, Czech Republic, September 2003. Published as Lecture Notes in Computer Science, LNCS 2738, Kurt Bauknecht, A Min Tjoa, Gerald Quirchmayr (eds.), Springer Verlag, New York, NY, 2003, pp. 248–258, (peer).
5. Xiaoming Chen<sup>ST</sup>, Xuan Zhou<sup>ST</sup>, Richard Scherl, and James Geller, Using an Interest Ontology for Improved Support in Rule Mining, Proceedings of the 5th International Conference, DaWaK 2003, Prague, Czech Republic, September 2003. Published as Lecture Notes in Computer Science, LNCS 2737, Yahiko Kambayashi, Mukesh Mohania and Wolfram Woess (eds.), Springer Verlag, New York, NY, 2003, pp. 320–329, (peer).
6. James Geller, Richard Scherl and Yehoshua Perl, Mining the Web for target marketing information, Proceedings of COLLECTer, Toulouse, France, April 20th, 2002, (peer), (no page numbers).

7. Li Zhang<sup>ST</sup>, Yehoshua Perl, Michael Halper<sup>ST</sup>, James Geller, James J. Cimino, Enriching the Structure of the UMLS Semantic Network, AMIA 2002, San Antonio, TX, pp. 939-943 (peer).
8. Yi Peng<sup>ST</sup>, Michael Halper<sup>ST</sup>, Yehoshua Perl, James Geller, Auditing the UMLS For Redundant Classifications, AMIA 2002, San Antonio, TX, pp. 612-616 (peer).
9. M. Halper<sup>ST</sup>, Z. Chen<sup>ST</sup>, J. Geller, and Y. Perl. A metaschema of the UMLS based on a partition of its Semantic Network. In S. Bakken, editor, Proceedings of the 2001 American Medical Informatics Association (AMIA) Annual Symposium, pages 234-238, Washington, DC, November 2001 (peer).
10. Y. Lee<sup>ST</sup>, J. Geller, E. K. Park, C. Oh, Data Mining with Distributed Agents in E-commerce Applications, Proceedings of the Fourteenth International Florida Artificial Intelligence Research Society Conference, Key West, Florida, May 2001, AAAI Press, pp 12-17 (peer).
11. J. Geller, C. Rush<sup>st</sup>, L. Liu<sup>st</sup>, M. Halper<sup>st</sup> and Y. Perl, Ownership Semantics in the Financial Domain, Proceedings of the 9th IFIP 2.6 Working Conference on Database Semantics (DS-9): Semantic Issues in e-Commerce Systems, April 2001, Hong Kong, pp. 340-356 (peer).
12. Z. Chen<sup>st</sup>, H. Gu<sup>st</sup>, M. Halper<sup>st</sup>, J. Geller, Y. Perl, A Metaschema for the UMLS Semantic Network, Proceedings of the METMBS, Las Vegas, Nevada, 2000, pp. 755-761 (peer).
13. Z. Chen<sup>st</sup>, M. Halper<sup>st</sup>, J. Geller and Y. Perl, A Structural Partition of the Unified Medical Language System's Semantic Network, Proceedings of the IEEE Int. Conf. on Information Technology Applications in Biomedicine, Arlington Virginia, November 2000, 296-301 (peer).
14. H. Gu<sup>st</sup>, Y. Perl, M. Halper<sup>st</sup>, J. Geller, F. Kuo<sup>st</sup> and J. J. Cimino, Extracting a Partition from a Complex Schema of a Medical Terminology, Proceedings of the IEEE Int. Conf. on Information Technology Applications in Biomedicine, Arlington, Virginia, November 2000, pp. 262-267 (peer).
15. H. Gu<sup>ST</sup>, J. Geller, L. Liu<sup>ST</sup>, M. Halper<sup>ST</sup>, Using a Similarity Measurement to Partition a Vocabulary of Medical Concepts. *10th International DEXA Conference*, Florence, Italy, August 1999. Published in: Lecture Notes in Computer Science, 1677, Springer Verlag, New York, 1999, pp. 712-723 (peer).

16. H. Gu<sup>ST</sup>, Y. Perl, J. Geller, M. Halper<sup>ST</sup>, L. Liu<sup>ST</sup>, and J. J. Cimino, Modeling the UMLS Using an OODB. *AMIA 1999 Fall Conference*, 1999, pp. 82-86 (peer).
17. H. Gu<sup>ST</sup>, L. Liu<sup>ST</sup>, M. Halper<sup>ST</sup>, J. Geller, and Y. Perl. Converting an integrated hospital formulary into an object-oriented database representation. In C.G. Chute, editor, *Proceedings of the 1998 American Medical Informatics Association Annual Fall Symposium*, pp. 770-774, Orlando, FL, November 1998 (peer).
18. Huanying (Helen) Gu<sup>ST</sup>, Yehoshua Perl, James Geller, Michael Halper<sup>ST</sup>, James J. Cimino and Mansnimar Singh<sup>ST</sup>, Partitioning a Vocabulary's IS-A Hierarchy into Trees, *Proceedings'97 American Medical Informatics Association (AMIA) Annual Fall Symposium*, (Nashville, TN), Oct. 25, 1997, pp. 630-634 (peer).
19. J. Geller, Challenge: How IJCAI 1999 can Prove the Value of AI by Using AI, *Proceedings of the Fifteenth International Joint Conference on Artificial Intelligence (IJCAI 1997)*, Nagoya, Japan, August 1997, pp. 55-58 (peer).
20. Yugyung (Eunice) Lee<sup>ST</sup> and James Geller, Constant Time Inheritance with Parallel Tree Covers, in *FLAIRS-96 (Florida AI Research Symposium, 1996)*, Key West, FL, 1996, pp. 243-250 (peer).
21. Yugyung (Eunice) Lee<sup>ST</sup> and James Geller, Parallel Transitive Reasoning on Mixed Relational Hierarchy, *Proceedings of the Conference on Knowledge Representation and Reasoning (KR-96)* Cambridge, MA, 1996, pp. 576-587 (peer).
22. Y. Perl, J. Geller and H. Gu<sup>ST</sup>, Identifying a Forest Hierarchy in an OODB Specialization Hierarchy Satisfying Disciplined Modeling, *Proceedings of the First IFCIS International Conference on Cooperative Information Systems (CoopIS96)*, Brussels, Belgium, 1996, 182-195 (peer).
23. H. Gu<sup>ST</sup>, J. Cimino, M. Halper<sup>ST</sup>, J. Geller and Y. Perl, Utilizing OODB schema modeling for vocabulary management, *Proc. 1996 AMIA Annual Fall Symposium*, J. Cimino (ed.), ACM, Washington, DC, 1996, pp. 274-278 (peer).
24. L. Liu<sup>ST</sup>, M. Halper<sup>ST</sup>, H. Gu<sup>ST</sup>, J. Geller, and Y. Perl, Modeling a Vocabulary in an Object-Oriented Database, *Proceedings of the Fifth International Conference on Information and Knowledge Management*, K. Barker and M. T. Ozsü (eds.), ACM Press, New York, NY, 1996, pp. 179-188 (peer).
25. Y. Lee<sup>ST</sup> and J. Geller, Parallel Operations on Class Hierarchies with Double

- Strand Representations IJCAI-95 Workshop Working Notes: Parallel Processing for Artificial Intelligence – 3, Montreal, Canada, 1995, pp. 107-119.
26. O. Yang<sup>ST</sup>, M. Halper<sup>ST</sup>, J. Geller, and Y. Perl, Modeling Business Applications with the OODB Ownership Relationship, Third International Conference on Artificial Intelligence Applications on Wall Street, New York, NY, 1995, pp. 2–10 (peer).
  27. Oscar (Ou) Yang<sup>ST</sup>, Michael Halper<sup>ST</sup>, James Geller, and Yehoshua Perl, The OODB Ownership Relationship, in: 1994 International Conference on Object-Oriented Information Systems (OOIS-94), D. Patel, Y. Sun and S. Patel (eds.), Springer Verlag, New York, 1994, pp. 278-291 (peer).
  28. Michael Halper<sup>ST</sup>, James Geller, Yehoshua Perl, and Wolfgang Klas, Integrating a Part Relationship into an Open OODB System using Metaclasses, Third International Conference on Information and Knowledge Management, Gaithersburg, MD, Nov. 29 - Dec. 1 , 1994, pp. 10-17 (peer).
  29. Ashish Mehta<sup>ST</sup>, James Geller, Yehoshua Perl, and Erich Neuhold, The OODB Path-Method Generator (PMG) using Precomputed Access Relevance, Proceedings of the 2nd Int'l Conference on Information and Knowledge Management, Washington DC, Nov. 1993, 596-605 (peer).
  30. M. Halper<sup>ST</sup>, J. Geller, and Y. Perl, Value Propagation in Object-Oriented Database Part Hierarchies, Proceedings of the 2nd Int'l Conference on Information and Knowledge Management, Washington DC, Nov. 1993, 606-614 (peer).
  31. Eunice (Yugyung) Lee<sup>ST</sup> and James Geller, Representing Transitive Relationships with Parallel Node Sets, Proceedings of the IEEE Workshop on Advances in Parallel and Distributed Systems, edited by Bharat Bhargava, IEEE Computer Society Press, Los Alamitos, California, 1993, pp. 140-145 (peer).
  32. Ashish Mehta<sup>ST</sup>, J. Geller, Y. Perl, and P. Fankhauser, Computing Access Relevance to Support Path-Method Generation in Interoperable Multi-OOB, RIDE-93 (Research Issues in Data Engineering) Workshop, Vienna, Austria, April 19–20, 1993, 144-151 (peer).
  33. Ashish Mehta<sup>ST</sup>, James Geller, Yehoshua Perl, and Peter Fankhauser, Algorithms for Access Relevance to support Path-Method Generation in OODBs, Fourth International Hong Kong Computer Society Database Workshop, Shatin, Hong

- Kong, Dec. 12–13, 1992, 183-200 (peer). CIS-92-10).
34. M. Halper<sup>ST</sup>, J. Geller, and Y. Perl, An OODB “Part” Relationship Model, Proceedings of the First International Conference on Information and Knowledge Management, Baltimore, Maryland, November 1992, 602–611 (peer).
  35. N. R. Adam, A. Gangopadhyay<sup>ST</sup>, and J. Geller, Knowledge Based Query Processing Using Preoptimized Queries Proceedings of the First International Conference on Information and Knowledge Management, Baltimore, Maryland, November 1992, 535–544 (peer).
  36. J. Geller, Y. Perl, P. Cannata, A. Sheth, and E. Neuhold, A Case Study of Structural Integration, Proceedings of the First International Conference on Information and Knowledge Management, Baltimore, Maryland, November 1992, 102–111 (peer).
  37. A. Mehta<sup>ST</sup>, J. Geller, Y. Perl, and P. Fankhauser, Algorithms for Computing Access Relevance in Object-Oriented Databases (Extended Abstract), Proceedings of the First International Conference on Information and Knowledge Management, Baltimore, Maryland, November 1992, 657 (peer).
  38. M. Halper<sup>ST</sup>, J. Geller, and Y. Perl, “Part” Relations for Object-Oriented Databases, in: G. Pernul and A. Tjoa (eds.), Proceedings of the 11th International Entity-Relationship Conference, Karlsruhe, Germany, October 1992, 406-422 (peer).
  39. M. Halper<sup>ST</sup>, J. Geller, Y. Perl, and E. Neuhold, A Graphical Schema Representation for Object-Oriented Databases, Proceedings of the First International Workshop on Interfaces to Database Systems (IDS-92), Glasgow, Scotland, July 1992; appeared in: R. Cooper (ed.), *Interfaces to Database Systems (IDS 92)*, Springer Verlag, New York, 1993, 282-307, (peer).
  40. J. Geller, A. Mehta<sup>ST</sup>, Y. Perl, E. Neuhold, and A. Sheth, Algorithms for Structural Schema Integration, *Second International Conference on Systems Integration*, Morristown, NJ, June 1992, 604-614 (peer).
  41. U. Mittal<sup>ST</sup> and J. Geller, Multiple Expert Systems, *Proceedings of the World Congress on Expert Systems*, Orlando, Florida, December 1991, 1741-1748 (peer).
  42. J. Geller, Upward-Inductive Inheritance and Constant Time Downward Inheritance in Massively Parallel Knowledge Representation, *IJCAI Workshop on Parallel Processing in AI* Sydney, Australia, August 1991, 63-68 (peer).

43. J. Geller, Y. Perl, and E. Neuhold, Structural Schema Integration in Heterogeneous Multi-Database Systems using the Dual Model, *Proceedings of the First International Workshop on Interoperability in Multidatabase systems (IMS-91)*, Kyoto, Japan, April 1991, 200-203 (peer).
44. E.J. Neuhold, J. Geller, Y. Perl, and V. Turau, A Theoretical Underlying Dual Model for Knowledge-Based Systems, *The First International Conference on Systems Integration*, Morristown, NJ, April 1990, 96-103 (peer).
45. E.J. Neuhold, Y. Perl, J. Geller, and V. Turau, Separating Structural and Semantic Elements in Object Oriented Knowledge Bases, *Advanced Database System Symposium*, Kyoto, Japan, 1989, 67-74 (peer).
46. J. Geller and S.C. Shapiro, Graphical Deep Knowledge for Intelligent Machine Drafting, *Tenth International Joint Conference on Artificial Intelligence*, Milano, Italy, Morgan Kaufmann Publishers Inc., Los Altos, CA, August 1987, 545-551 (peer).
47. J. Geller, M.R. Taie, S.C. Shapiro, and S.N. Srihari, Device Representation and Graphics Interfaces of VMES, *Second International Conference on Applications of Artificial Intelligence in Engineering*. August 1987. Appeared in: Knowledge Based Expert Systems for Engineering: Classification, Education and Control, D. Sriram and R.A. Adey (editors) Computational Mechanics Publications, Southampton, UK, 1987, 15-28.
48. M.R. Taie, J. Geller, S.N. Srihari, and S.C. Shapiro, Knowledge Based Modeling of Circuit Boards, *Proceedings of the Annual Reliability and Maintainability Symposium*, Philadelphia, PA, January 1987, 422-427, (peer).
49. M.R. Taie, S.N. Srihari, J. Geller, and S.C. Shapiro, Device Representation using Instantiation Rules and Structural Templates, *Proceedings of the Sixth Canadian Conference on Artificial Intelligence*, May 1986, 124-128 (peer).
50. S.C. Shapiro, S.N. Srihari, M. Taie and J. Geller, VMES: A Network Based Versatile Maintenance Expert System, *Proc. of 1st International Conference on Applications of AI to Engineering Problems*, Southampton University, United Kingdom, April 1986, 925-936 (peer).
51. J. Geller, The Teachable Letter Recognizer, *Ninth International Joint Conference on Artificial Intelligence*, Los Angeles, CA, 1985, 249-251, (peer).

- C. 1. Published Non-Refereed Journal Papers (Appendix V. C1)
1. James Geller, Book Review of: John Sowa, Knowledge Representation: Logical, Philosophical, and Computational Foundations, in *Minds and Machines*, **13**(3), August 2003, pp. 441-444.
  2. J. Geller, Mining the Web for Marketing Knowledge, in: *Telecom & IT Newsletter*, **1**(3), A. G. Franz Associates, Plainsboro, NJ, p. 2, October 2002.
  3. J. Geller, Innovative Applications of Massive Parallelism, in: *AAAI 1993 Spring Symposium Series Reports*, AI Magazine, **14**(3), 1993, p. 36.
  4. J. Geller, A theoretical foundation for massively parallel Knowledge Representation, *Parallel Computing News*, **3**(11), 1990, 4-8.
  5. S.C. Shapiro, S.N. Srihari, J. Geller, and M. R. Taie, A Fault Diagnosis System Based on an Integrated Knowledge Base, In D. Sriram and M. D. Rychener (editors), Knowledge-Based Engineering Systems Research in Progress, *IEEE Software* **3**(2) March 1986, 48-49.
  6. S.C. Shapiro, S.N. Srihari, M. Taie, and J. Geller, Development of an Intelligent Maintenance Assistant, *SIGART Newsletter* **92**, April 1985, 48-49.
2. Published Non-Refereed Conference Papers (Appendix V. C2)
1. S. Winz and J. Geller, Methods of Large Grammar Representation in Massively Parallel Parsing Systems, *AAAI Spring Symposium Series Working Notes: Innovative Applications of Massive Parallelism*, Stanford University, March 23-25, 1993, 225-233.
  2. J. Geller, Massively Parallel Knowledge Representation, *AAAI Spring Symposium Series Working Notes: Innovative Applications of Massive Parallelism*, Stanford University, March 23-25, 1993, 90-97.
  3. J. Geller, A. Mehta<sup>ST</sup>, P. Venkatesh<sup>ST</sup>, and Y. Perl, Knowledge Rich Graphical Interface Tools for Object-Oriented CAD, Stephen A. Magnus (editor), *The Manager's Guide to Implementing Object-Oriented Databases in Manufacturing*, Management Roundtable, Boston, MA, 1992, 281-295.
  4. J. Geller, Acquisition of Attribute Applicability, *IJCAI Workshop on Machine Learning of Natural Language* Sydney, Australia, August 1991, 27-34.
  5. J. Geller and S.C. Shapiro, Knowledge Based Interfaces, *AAAI-86 Workshop on*

- Intelligence in Interfaces*, B. Neches and T. Kaczmarek (editors), August 1986, 31-36.
6. J. Geller, Towards a Theory of Visual Reasoning, In: *Open House 1986: Current Research by Graduate Students of the Computer Science Dept., SUNY at Buffalo*, J. Geller and K. Bettinger (editors), Report 86-08, Dept. of Computer Science, State University of New York at Buffalo, March 1986, 17-19.
3. Published Reports (Appendix V. C3)
    1. James Geller and Yehoshua Perl, Final Report: Object-Oriented Health Vocabulary Repository (OOHVR). Submitted to the South Carolina Research Authority (SCRA – Grant Coordinator) for report to the National Institute for Standards and Technology (NIST – Funding Agency), May 1999, 36 pages.
    2. Robert Pfeffer et al. Electronic networks solutions for rising healthcare costs. Research report, New Jersey Institute of Technology, Newark, NJ and Thomas Edison State College, Trenton, NJ, <http://www.njit.edu/NJIT/Publications/Reports/HINT/index.html>, 1995.
    3. Y. Perl and J. Geller, FINAL REPORT Cooperation Agreement between GMD-IPSI and NJIT-INIS 1988–1993, April 1994, 138 pages.
    4. J. Geller, Y. Perl, P. Cannata, and A. Sheth, Structural Integration: A Technique for View Integration using the Dual Model, Bellcore Technical Memo TM-ST-017628/1, September 1991, 26 pages.
    5. J. Geller, *A Knowledge Representation Theory for Natural Language Graphics*, PhD Thesis, Dept. of Computer Science, State University of New York at Buffalo, published as report 88-15, July 1988, 288 pages.
    6. J. Geller, Pragmatic Maxims for Graphical Representations, Northeast Artificial Intelligence Consortium, Technical Report Series, Report TR-8730, 1988, 13 pages.
    7. S.C. Shapiro, S.N. Srihari, J. Geller, M. Taie, S.S. Campbell, VMES: A network-based versatile maintenance expert system, Annual Report on Contract F30602-85-C-0008, submitted to Northeast Artificial Intelligence Consortium (NAIC), November 1985, 23 pages.
    8. S.C. Shapiro, S.N. Srihari, J. Geller, M.R. Taie, C. Choy, and A.H. Yuhan, A

Graphics Interface to a Rule-based System, Final Report on Contracts SCEEE-PDP/84-30 and SCEEE-PDP/84-31, submitted to SCEEE (Southeastern Center for Electrical Engineering Education), State University of New York at Buffalo, January 1985, 82 pages.

9. S.C. Shapiro, S.N. Srihari, J. Geller, M.R. Taie, and C. Choy, A Graphics Interface to a Rule-based System, First Quarterly Report submitted to SCEEE (Southeastern Center for Electrical Engineering Education), State University of New York at Buffalo, May 1984, 27 pages.
10. J. Geller, *Magnetokalorische Energiegewinnung*, Masters Thesis, Institut fuer Grundlagen und Theory der Elektrotechnik, Technische Universitaet Vienna, November 1979.

D. Published Reviews (Appendix V. D)

1. J. Geller Review of Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques with Java Implementations, Morgan Kaufmann Publishers, 2000. In: SIGMOD Record, **31**(1), March 2002, pp. 76-77.
2. J. Geller, Review of Edward A. Feigenbaum and Julian Feldman, eds., *Computers and Thought*, Menlo Park CA: AAAI Press/MIT Press, 1995 [reprint of 1963 edition].
3. J. Geller, Review of A. M. Frisch, The substitutional framework for sorted deduction: fundamental results on hybrid reasoning, *Artificial Intelligence* **49**(1-3), 1991, pp. 161-198. In: Computing Reviews, December 1993.
4. J. Geller, Review of S. Tanimoto, The Elements of Artificial Intelligence using Common LISP, Computer Science Press, New York, 1990, In: *Minds and Machines* **3**(3), August 1993, pp. 345-348.
5. J. Geller, Review of S.T. Dekker, H.J. van den Herik, and I.S. Herschberg, Perfect Knowledge Revisited, *Artificial Intelligence*, 43 (1): 111-123, April 1990. In: *Computing Reviews*, **32**(12), December 1991, 645, Rev. No. 9112-0976.
6. J. Geller, Review of A.P. Pentland, Perceptual Organization and the Representation of Natural Form. *Artificial Intelligence*, 28 (3):293-331, May 1986. In: *Computing Reviews*, **28**(3), March 1987, 169, Rev. No. 8703-0212.
7. J. Geller, Review of N.J. Nilsson, Probabilistic Logic. *Artificial Intelligence*, 28 (1):71-118, February 1986. In: *Computing Reviews*, **27**(9), September 1986, 471, Rev. No. 8609-0841.