PEDRO M. DOMINGOS

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INTERESTS

Artificial intelligence, machine learning and data mining.

EDUCATION

1997: Ph.D. in Information and Computer Science, University of California, Irvine. Dissertation title: *A Unified Approach to Concept Learning*. Advisor: Dennis Kibler. Committee members: Michael Pazzani, Padhraic Smyth and J. Ross Quinlan.

1994: Master of Science in Information and Computer Science, University of California, Irvine.

1992: Master of Science in Electrical Engineering and Computer Science, specialization in Computers, Instituto Superior Técnico, Technical University of Lisbon, Portugal. Thesis title: *Competitive Recall: A Memory Model for Real-Time Reasoning*.

1988: *Licenciatura* (a 5-year degree) in Electrical Engineering and Computer Science, specialization in Systems and Computers, Instituto Superior Técnico, Technical University of Lisbon, Portugal.

SCHOLARSHIPS, HONORS AND AWARDS

2003: Sloan Research Fellowship.

2002: Selected to win ONR Young Investigator Award.[1]

2001: Selected to participate in the National Academy of Engineering Symposium on Frontiers of Engineering.

2000: NSF CAREER Award.

2000: IBM Faculty Partnership Award.

1999: Best Paper Award for Fundamental Research at the Fifth International Conference on Knowledge Discovery and Data Mining.

1998: Best Paper Award for Fundamental Research at the Fourth International Conference on Knowledge Discovery and Data Mining.

1997: Ph.D. thesis nominated by UCI for ACM Doctoral Dissertation Award.

1996–97: NATO Scholarship.

1992–97: Fulbright Scholarship. Awarded by the United States to 20 out of approximately 3000 candidates in Portugal.

1997: Recognized as an outstanding reviewer by the program committee of the Fifteenth International Joint Conference on Artificial Intelligence (one of fewer than 10% of the reviewers).

[1] Could not receive award due to delays in obtaining US permanent resident status.

1996: Selected for the SIGART/AAAI Doctoral Consortium.

1996: University of California Regents' Dissertation Fellowship. Awarded to approximately 30 students campuswide.

1992–96: Scholarship from JNICT, Portugal's national scientific and technological research agency.

1995: Two papers nominated for the C.V. Ramamoorthy Best Paper Award, Seventh IEEE International Conference on Tools with Artificial Intelligence.

1990: Honorable mention in the Descartes Award, given annually to a Portuguese civil servant for original and innovative work in information technology.

1989: Winner of the IEEE Region 8 (Europe, Africa and Middle East) Student Paper Contest.

PROFESSIONAL EXPERIENCE

1999–present: Assistant Professor of Computer Science and Engineering at the University of Washington. Courses taught: Artificial Intelligence I and II (graduate), Applications of Artificial Intelligence (graduate), Data Mining (graduate), Introduction to Artificial Intelligence (undergraduate).

1997–99: Assistant Professor at Instituto Superior Técnico, Lisbon, Portugal. Courses taught: Machine Learning, Natural Language Processing (undergraduate); co-taught: Intelligent Systems (graduate).

1994: Consultant for the Irvine Research Corporation.

1987–92: Teaching and research assistant at Instituto Superior Técnico, Lisbon, Portugal. Courses taught: Probability and Statistics, Applied Mathematics (instructor), Introduction to Computer Science, Artificial Intelligence.

1990–92: Author of a regular column on the future of music technology in the Portuguese magazine *Music, Instruments and Technology*.

1989–90: Developer of an AI-based system for personnel selection and job assignment at the Portuguese Army's Center for Psychotechnical Studies.

1986–89: Intern and then researcher at INESC – Institute for Systems and Computer Engineering, Lisbon, Portugal, first in the digital signal processing and speech recognition group, and then in the computer graphics group.

1987–88: Teacher of continuing education courses in digital electronics, telecommunications, and introduction to microcomputing.

PROFESSIONAL SERVICE

2002–present: Associate editor, *Journal of Artificial Intelligence Research*.

2001–present: Founding board member, International Machine Learning Society.

2001–present: Editorial board member, *Machine Learning*.

2000–present: Editorial board member, *Intelligent Data Analysis*.

1998–present: Editorial board member, *Evaluation of Intelligent Systems*.

1997–present: Editorial board member, *Applied Intelligence*.

2004: Program committee member, 2004 ACM SIGMOD Intl. Conf. on Management of Data.

Workshop proposal reviewer, Nineteenth Natl. Conf. on Artificial Intelligence (AAAI-2004).

2003: Program co-chair, Ninth Intl. Conf. on Knowledge Discovery and Data Mining.
Program committee member, KDD-2003 Wkshp. on Multi-Relational Data Mining.
PC member, IJCAI-2003 Wkshp. on Learning Statistical Models from Relational Data.
Best paper selection committee member, *Machine Learning*.

2002: Program committee member, Nineteenth Intl. Conf. on Machine Learning.
Program committee member, Eleventh Intl. World Wide Web Conf.
Program committee member, KDD-2002 Wkshp. on Multi-Relational Data Mining.

2001–02: Reviewer, *Journal of Machine Learning Research*.

2000–02: Editorial board member, *Journal of Artificial Intelligence Research*.

2000–02: Reviewer, Lawrence Livermore Natl. Lab. University Collaborative Research Program.

2001: Area chair (supervised learning), Eighteenth Intl. Conf. on Machine Learning.
Panels chair, Seventh Intl. Conf. on Knowledge Discovery and Data Mining.
Best paper awards committee, Seventh Intl. Conf. on Knowledge Discovery and Data Mining.
Reviewer, 2001 ACM SIGMOD International Conference on Management of Data.
Panelist, 2001 SIGART Doctoral Consortium.

1993–2001: Reviewer, *Machine Learning*.

1997–2000: Reviewer, *Data Mining and Knowledge Discovery*.

2000: Program committee member, Seventeenth Natl. Conf. on Artificial Intelligence (AAAI-2000).
Program committee member, Seventeenth Intl. Conf. on Machine Learning.
Program committee member, Eleventh European Conf. on Machine Learning.
Program committee member, Fifth Intl. Wkshp. on Multistrategy Learning.
Reviewer, Fourteenth Annual Conf. on Neural Information Processing Systems.
Panel member, National Science Foundation.

1999: Program committee member, Fifth Intl. Conf. on Knowledge Discovery and Data Mining.
Program committee member, Sixteenth Intl. Joint Conf. on Artificial Intelligence.
Program committee member, Sixteenth Natl. Conf. on Artificial Intelligence (AAAI-99).
Program committee member, Sixteenth Intl. Conf. on Machine Learning.
Advisory committee member, 2nd. Intl. Wkshp. on Extraction of Knowledge from Databases.
Reviewer, *IEEE Intelligent Systems*.
Reviewer, *IEEE Computer*.

1997–99: Reviewer, *Journal of Artificial Intelligence Research*.

1998: Program committee member, Fourth Intl. Conf. on Knowledge Discovery and Data Mining.
Program committee member, Fifteenth Natl. Conf. on Artificial Intelligence (AAAI-98).
Program committee member, Fifteenth Intl. Conf. on Machine Learning.
Reviewer, Twentieth Annual Meeting of the Cognitive Science Society.
Reviewer, *Intelligent Data Analysis*.

1997: Program committee member, Fourteenth Natl. Conf. on Artificial Intelligence (AAAI-97).
Reviewer, Fifteenth Intl. Joint Conf. on Artificial Intelligence.

1996: Program committee member, ICML-96 Wkshp. on Learning in Context-Sensitive Domains.

1995: Reviewer, *Artificial Intelligence Review*.

1990: Founder of the Computer Division of the IST Student Union.

PROFESSIONAL MEMBERSHIPS

Association for Computing Machinery.
ACM Special Interest Group on Artificial Intelligence.
ACM Special Interest Group on Knowledge Discovery and Data Mining.
ACM Special Interest Group on Management of Data.
American Association for Artificial Intelligence.
Institute of Electrical and Electronics Engineers.
IEEE Computer Society.
Portuguese Association for Artificial Intelligence.
Portuguese Association for Pattern Recognition.
Portuguese Informatics Association.
Portuguese Engineering Society.

GRANTS AND OTHER FUNDING

2003-05: Sloan Research Fellowship, $40,000.

2002-05: *Learning and Inference in Collective Knowledge Bases*, Office of Naval Research, $300,000.

2000-04: *Ubiquitous, Large-Scale Machine Learning*, NSF CAREER Award, $313,695.

2000-05: Ford Motor Co. gift in support of data mining research and education, $300,000.

2000: IBM Faculty Partnership Award, $40,000.

1998–99: *Algorithms for Data Mining*, Portuguese Science Foundation, PTE 3,500,000.

STUDENTS

Ph.D. supervisor or co-supervisor (current)

Parag
Dan Grossman
Geoff Hulten
Jayant Madhavan (with Alon Halevy)
Matt Richardson
Sumit Sanghai (with Daniel Weld)

Ph.D. supervisor or co-supervisor (graduated)

Corin Anderson (with Daniel Weld), software engineer, Google, Inc.
Dissertation: *Personalizing Web Sites with Machine Learning and Data Mining* (2002)

AnHai Doan (with Alon Halevy), assistant professor, University of Illinois at Urbana-Champaign.
Dissertation: *Learning to Map between Structured Representations of Data* (2002)

Tessa Lau (with Daniel Weld), research staff member, IBM T. J. Watson Research Center.
Dissertation: *Programming by Demonstration: A Machine Learning Approach* (2001)

INVITED TALKS

2004: Ninth Conference of the International Federation of Classification Societies (Chicago, IL).
Workshop on Web Structure and Algorithms (Pittsburgh, PA).
IBM Thomas J. Watson Research Center (Yorktown Heights and Hawthorne, NY).
USC Information Sciences Institute (Marina del Rey, CA).

2003: University of Illinois, Urbana-Champaign.
International Workshop on Data Mining and Adaptive Modelling Methods for Economics and Management (Porto, Portugal).
Eleventh Portuguese Conference on Artificial Intelligence (Beja, Portugal).

2002: Natl. Academies Wkshp. on Statistical Analysis of Massive Data Streams (Wash., DC).
Carnegie Mellon University (Pittsburgh, PA).
University of Texas, Austin.
University of Michigan, Ann Arbor.
Boeing Phantom Works (Bellevue, WA).
Thirty-Fourth Symposium on the Interface of Comp. Sci. and Statistics (Montreal, Canada).
University of California, Irvine.

2001: NIPS-2001 Wkshp. on Foundns. of Occam's Razor & Parsimony in Learning (Whistler, BC).
Oregon State University (Corvallis, OR).
DIMACS Summer School Tutorial on New Frontiers in Data Mining (Piscataway, NJ).
Microsoft Research (Redmond, WA).

2000: IBM Thomas J. Watson Research Center (Yorktown Heights and Hawthorne, NY).
Eleventh European Conference on Machine Learning (Barcelona, Spain).
ICML-2000 Workshop on Cost-Sensitive Learning (Stanford, CA).
ICML-2000 Workshop on What Works Well Where (Stanford, CA).
Fifth International Workshop on Multistrategy Learning (Guimarães, Portugal).
Hewlett-Packard Laboratories (Palo Alto, CA).
University of Porto (Portugal).

1999: IJCAI-99 Workshop on Support Vector Machines (Stockholm, Sweden).
Thirty-First Symposium on the Interface of Comp. Sci. and Statistics (Schaumburg, IL).

1998: NIPS-98 Workshop on Turnkey Algorithms for Improving Generalizers (Breckenridge, CO).
Intl. Summer School on Knowledge Discovery and Data Mining (Caminha, Portugal).
Fourth International Workshop on Multistrategy Learning (Desenzano del Garda, Italy).
Microsoft Research (Redmond, WA).
University of California, Irvine.

1997: Intl. Wkshp. on Stochastic Model Building & Var. Selection (Duke Univ., Durham, NC).
George Mason University (Fairfax, VA).
AT&T Laboratories (Murray Hill, NJ).

1996: University of California, San Diego.
Daimler-Benz Research Center (Ulm, Germany).

1995: University of Porto (Portugal).
Naval Research Laboratory (Washington, DC).

SOFTWARE RELEASED

VFML (beta): A toolkit for mining massive data sources
http://www.cs.washington.edu/dm/vfml/

BVD: A bias-variance decomposition for zero-one loss
http://www.cs.washington.edu/homes/pedrod/bvd.c

RISE: A unified rule- and instance-based learner
http://www.cs.washington.edu/homes/pedrod/rise.c

BOOKS

1. P. Domingos, C. Faloutsos, T. Senator, H. Kargupta and L. Getoor (editors), *Proceedings of the Ninth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, ACM Press, 2003.

BOOK CHAPTERS

2. G. Hulten and P. Domingos, "Decision Trees over Streaming Data," in *Data Stream Management: Processing High-Speed Data Streams*, edited by M. Garofalakis, J. Gehrke and R. Rastogi, Springer. To appear.
3. M. Richardson and P. Domingos, "Combining Link and Content Information in Web Search," in *Web Dynamics*, edited by M. Levene and A. Poulovassilis, Springer. To appear.
4. A. Doan, J. Madhavan, P. Domingos and A. Halevy, "Ontology Matching: A Machine Learning Approach," in *Handbook on Ontologies in Information Systems* (pp. 397-416), edited by S. Staab and R. Studer, Springer, 2003.
5. P. Domingos, "Machine Learning," in *Handbook of Data Mining and Knowledge Discovery* (pp. 660-670), edited by W. Klösgen and J. Żytkow, Oxford University Press, 2002.
6. P. Domingos, ""Context-Sensitive Feature Selection for Lazy Learners," in *Encyclopedia of Microcomputers* (pp. 51-72), edited by A. Kent and J. Williams, Marcel Dekker, 2001.
7. T. Lau, S. Wolfman, P. Domingos and D. Weld, "Learning Repetitive Text-Editing Procedures with SMARTedit," in *Your Wish Is My Command: Giving Users the Power to Instruct their Software* (pp. 209-225), edited by H. Lieberman, Morgan Kaufmann, 2001.
8. P. Domingos, "Web Mining," in *The Future of the Internet* (in Portuguese) (pp. 285-288), edited by J. Alves, P. Campos and P. Brito, Centro Atlântico, 1999.
9. P. Domingos, "Context-Sensitive Feature Selection for Lazy Learners," in *Lazy Learning* (pp. 227-253), edited by D. Aha, Kluwer, 1997.
10. P. Domingos, R. Casteleiro and P. Diniz, "GEAR – A 3D Computer Animation System for CAD and Simulation," in *IEEE Student Papers* (pp. 167-175), IEEE, 1989.

JOURNAL ARTICLES

11. A. Doan, J. Madhavan, R. Dhamankar, P. Domingos and A. Halevy, "Learning to Match Ontologies on the Semantic Web," *VLDB Journal*. To appear.
12. P. Domingos and G. Hulten, "A General Framework for Mining Massive Data Streams" (short paper), *Journal of Computational and Graphical Statistics*, vol. 12, 2003. To appear.

13. T. Lau, S. Wolfman, P. Domingos and D. Weld, "Programming by Demonstration Using Version Space Algebra," *Machine Learning*, vol. 53 (pp. 111-156), 2003.
14. F. Provost and P. Domingos, "Tree Induction for Probability-Based Ranking," *Machine Learning*, vol. 52 (pp. 199-216), 2003.
15. A. Doan, P. Domingos and A. Halevy, "Learning to Match the Schemas of Data Sources: A Multistrategy Approach," *Machine Learning*, vol. 50 (pp. 279-301), 2003.
16. P. Domingos, "The Role of Occam's Razor in Knowledge Discovery," *Data Mining and Knowledge Discovery*, vol. 3 (pp. 409-425), 1999.
17. P. Domingos, "Knowledge Discovery Via Multiple Models," *Intelligent Data Analysis*, vol. 2 (pp. 187-202), 1998.
18. P. Domingos and M. Pazzani, "On the Optimality of the Simple Bayesian Classifier under Zero-One Loss," *Machine Learning*, vol. 29 (pp. 103-130), 1997.
19. P. Domingos, "Context-Sensitive Feature Selection for Lazy Learners," *Artificial Intelligence Review*, vol. 11 (pp. 227-253), 1997.
20. P. Domingos, "Unifying Instance-Based and Rule-Based Induction," *Machine Learning*, vol. 24 (pp. 141-168), 1996.
21. P. Domingos, "Two-Way Induction," *International Journal on Artificial Intelligence Tools*, vol. 5 (pp. 113-125), 1996.
22. P. Domingos, R. Casteleiro and P. Diniz, "GEAR – A 3D Computer Animation System for CAD and Simulation," *Computers and Graphics*. Accepted for publication.
23. P. Domingos and P. Oliveira, "Intelligent Traffic Control for AGV Networks" (in Portuguese), *Técnica*, vol. 91/1 (pp. 35-39), 1992.
24. P. Domingos, R. Casteleiro and P. Diniz, "Computer Animation with the GEAR System" (in Portuguese), *Ingenium – Journal of the Portuguese Engineering Society*, vol. 31 (pp. 26-36), 1989.

REFEREED CONFERENCE PUBLICATIONS

25. M. Richardson and P. Domingos, "Learning with Knowledge from Multiple Experts," in *Proceedings of the Twentieth International Conference on Machine Learning* (pp. 624-631), Washington, DC, 2003.
26. S. Sanghai, P. Domingos and D. Weld, "Dynamic Probabilistic Relational Models," in *Proceedings of the Eighteenth International Joint Conference on Artificial Intelligence* (pp. 992-997), Acapulco, Mexico, 2003.
27. M. Richardson and P. Domingos, "Building Large Knowledge Bases by Mass Collaboration," in *Proceedings of the Second International Conference on Knowledge Capture* (pp. 129-137), Sanibel Island, FL, 2003.
28. T. Lau, P. Domingos and D. Weld, "Learning Programs from Traces Using Version Space Algebra," in *Proceedings of the Second International Conference on Knowledge Capture* (pp. 36-43), Sanibel Island, FL, 2003.
29. M. Richardson, R. Agrawal and P. Domingos, "Trust Management for the Semantic Web," in *Proceedings of the Second International Semantic Web Conference* (pp. 351-368), Sanibel Island, FL, 2003.

30. M. Richardson and P. Domingos, "Mining Knowledge-Sharing Sites for Viral Marketing," in *Proceedings of the Eighth International Conference on Knowledge Discovery and Data Mining* (pp. 61-70), Edmonton, Canada, 2002.

31. C. Anderson, P. Domingos and D. Weld, "Relational Markov Models and their Application to Adaptive Web Navigation," in *Proceedings of the Eighth International Conference on Knowledge Discovery and Data Mining* (pp. 143-152), Edmonton, Canada, 2002.

32. G. Hulten and P. Domingos, "Mining Complex Models from Arbitrarily Large Databases in Constant Time," in *Proceedings of the Eighth International Conference on Knowledge Discovery and Data Mining* (pp. 525-531), Edmonton, Canada, 2002.

33. J. Madhavan, P. Bernstein, P. Domingos and A. Halevy, "Representing and Reasoning about Mappings between Domain Models," in *Proceedings of the Eighteenth National Conference on Artificial Intelligence* (pp. 80-86), Edmonton, Canada, 2002.

34. A. Doan, J. Madhavan, P. Domingos and A. Halevy, "Learning to Map between Ontologies on the Semantic Web," in *Proceedings of the Eleventh International World Wide Web Conference* (pp. 662-673), Honolulu, HI, 2002.

35. P. Domingos and G. Hulten, "Learning from Infinite Data in Finite Time," in *Advances in Neural Information Processing Systems 14* (pp. 673-680), Vancouver, BC, 2001.

36. M. Richardson and P. Domingos, "The Intelligent Surfer: Probabilistic Combination of Link and Content Information in PageRank," in *Advances in Neural Information Processing Systems 14* (pp. 1441-1448), Vancouver, BC, 2001.

37. P. Domingos and M. Richardson, "Mining the Network Value of Customers," in *Proceedings of the Seventh International Conference on Knowledge Discovery and Data Mining* (pp. 57-66), San Francisco, CA, 2001.

38. G. Hulten, L. Spencer and P. Domingos, "Mining Time-Changing Data Streams," in *Proceedings of the Seventh International Conference on Knowledge Discovery and Data Mining* (pp. 97-106), San Francisco, CA, 2001.

39. C. Anderson, P. Domingos and D. Weld, "Adaptive Web Navigation for Wireless Devices," in *Proceedings of the Seventeenth International Joint Conference on Artificial Intelligence* (pp. 879-884), Seattle, WA, 2001.

40. P. Domingos and G. Hulten, "A General Method for Scaling Up Machine Learning Algorithms and its Application to Clustering," in *Proceedings of the Eighteenth International Conference on Machine Learning* (pp. 106-113), Williamstown, MA, 2001.

41. A. Doan, P. Domingos and A. Halevy, "Reconciling Schemas of Disparate Data Sources: A Machine-Learning Approach," in *Proceedings of the 2001 ACM SIGMOD International Conference on Management of Data* (pp. 509-520), Santa Barbara, CA, 2001.

42. C. Anderson, P. Domingos and D. Weld, "Personalizing Web Sites for Mobile Users," in *Proceedings of the Tenth International World Wide Web Conference* (pp. 565-575), Hong Kong, 2001.

43. S. Wolfman, T. Lau, P. Domingos and D. Weld, "Mixed Initiative Interfaces for Learning Tasks: SMARTedit Talks Back," in *Proceedings of the Fifth International Conference on Intelligent User Interfaces* (pp. 167-174), Santa Fe, NM, 2001.

44. P. Domingos and G. Hulten, "Mining High-Speed Data Streams," in *Proceedings of the Sixth International Conference on Knowledge Discovery and Data Mining* (pp. 71-80), Boston, MA, 2000.

45. P. Domingos, "A Unified Bias-Variance Decomposition for Zero-One and Squared Loss," in *Proceedings of the Seventeenth National Conference on Artificial Intelligence* (pp. 564-569), Austin, TX, 2000.

46. P. Domingos, "Bayesian Averaging of Classifiers and the Overfitting Problem," in *Proceedings of the Seventeenth International Conference on Machine Learning* (pp. 223-230), Stanford, CA, 2000.

47. T. Lau, P. Domingos and D. Weld, "Version Space Algebra and its Application to Programming by Demonstration," in *Proceedings of the Seventeenth International Conference on Machine Learning* (pp. 527-534), Stanford, CA, 2000.

48. P. Domingos, "A Unified Bias-Variance Decomposition and its Applications," in *Proceedings of the Seventeenth International Conference on Machine Learning* (pp. 231-238), Stanford, CA, 2000.

49. P. Domingos, "MetaCost: A General Method for Making Classifiers Cost-Sensitive," in *Proceedings of the Fifth International Conference on Knowledge Discovery and Data Mining* (pp. 155-164), San Diego, CA, 1999.

50. P. Domingos, "Process-Oriented Estimation of Generalization Error," in *Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence* (pp. 714-719), Stockholm, Sweden, 1999.

51. P. Domingos, "Occam's Two Razors: The Sharp and the Blunt," in *Proceedings of the Fourth International Conference on Knowledge Discovery and Data Mining* (pp. 37-43), New York, 1998.

52. P. Domingos, "A Process-Oriented Heuristic for Model Selection," in *Proceedings of the Fifteenth International Conference on Machine Learning* (pp. 127-135), Madison, WI, 1998.

53. P. Domingos, "Why Does Bagging Work? A Bayesian Account and its Implications," in *Proceedings of the Third International Conference on Knowledge Discovery and Data Mining* (pp. 155-158), Newport Beach, CA, 1997.

54. P. Domingos, "Learning Multiple Models Without Sacrificing Comprehensibility" (student abstract), in *Proceedings of the Fourteenth National Conference on Artificial Intelligence* (p. 829), Providence, RI, 1997.

55. P. Domingos, "A Comparison of Model Averaging Methods in Foreign Exchange Prediction" (student abstract), in *Proceedings of the Fourteenth National Conference on Artificial Intelligence* (p. 828), Providence, RI, 1997.

56. P. Domingos, "Knowledge Acquisition from Examples Via Multiple Models," in *Proceedings of the Fourteenth International Conference on Machine Learning* (pp. 98-106), Nashville, TN, 1997.

57. P. Domingos, "Towards a Unified Approach to Concept Learning" (student abstract), in *Proceedings of the Thirteenth National Conference on Artificial Intelligence* (p. 1361), Portland, OR, 1996.

58. P. Domingos, "Fast Discovery of Simple Rules" (student abstract), in *Proceedings of the Thirteenth National Conference on Artificial Intelligence* (p. 1384), Portland, OR, 1996.

59. P. Domingos, "Multistrategy Learning: A Case Study" (student abstract), in *Proceedings of the Thirteenth National Conference on Artificial Intelligence* (p. 1385), Portland, OR, 1996.

60. P. Domingos and M. Pazzani, "Simple Bayesian Classifiers Do Not Assume Independence" (student abstract), in *Proceedings of the Thirteenth National Conference on Artificial Intelligence* (p. 1386), Portland, OR, 1996.
61. P. Domingos, "Linear-Time Rule Induction," in *Proceedings of the Second International Conference on Knowledge Discovery and Data Mining* (pp. 96-101), Portland, OR, 1996.
62. P. Domingos, "Efficient Specific-to-General Rule Induction," in *Proceedings of the Second International Conference on Knowledge Discovery and Data Mining* (pp. 319-322), Portland, OR, 1996.
63. P. Domingos and M. Pazzani, "Beyond Independence: Conditions for the Optimality of the Simple Bayesian Classifier," in *Proceedings of the Thirteenth International Conference on Machine Learning* (pp. 105-112), Bari, Italy, 1996.
64. P. Domingos, "Two-Way Induction," in *Proceedings of the Seventh IEEE International Conference on Tools with Artificial Intelligence* (pp. 182-189), Herndon, VA, 1995.
65. P. Domingos and E. Morgado, "Progressive Rules: A Method for Representing and Using Real-Time Knowledge," in *Proceedings of the Seventh IEEE International Conference on Tools with Artificial Intelligence* (pp. 408-415), Herndon, VA, 1995.
66. P. Domingos, "Rule Induction and Instance-Based Learning: A Unified Approach," in *Proceedings of the Fourteenth International Joint Conference on Artificial Intelligence* (pp. 1226-1232), Montréal, Canada, 1995.
67. P. Domingos, "The RISE System: Conquering Without Separating," in *Proceedings of the Sixth IEEE International Conference on Tools with Artificial Intelligence* (pp. 704-707), New Orleans, LA, 1994.
68. P. Domingos and E. Morgado, "Competitive Recall: A Model for Real-Time Reasoning," in *Proceedings of the Fourth Iberoamerican Congress on Artificial Intelligence* (pp. 3-14), Caracas, Venezuela, 1994.

REFEREED WORKSHOP PUBLICATIONS

69. P. Domingos, Y. Abe, C. Anderson, A. Doan, D. Fox, A. Halevy, G. Hulten, H. Kautz, T. Lau, L. Liao, J. Madhavan, Mausam, D. Patterson, M. Richardson, S. Sanghai, D. Weld and S. Wolfman, "Research on Statistical Relational Learning at the University of Washington," in *Proceedings of the IJCAI-2003 Workshop on Learning Statistical Models from Relational Data* (pp. 43-47), Acapulco, Mexico, 2003.
70. G. Hulten, P. Domingos and Y. Abe, "Mining Massive Relational Databases," in *Proceedings of the IJCAI-2003 Workshop on Learning Statistical Models from Relational Data* (pp. 53-60), Acapulco, Mexico, 2003.
71. S. Sanghai, P. Domingos and D. Weld, "Learning Statistical Models of Time-Varying Relational Data," in *Proceedings of the IJCAI-2003 Workshop on Learning Statistical Models from Relational Data* (pp. 131-132), Acapulco, Mexico, 2003.
72. C. Anderson, P. Domingos and D. Weld, "Web Site Personalizers for Mobile Devices," in *Proceedings of the IJCAI-2001 Workshop on Intelligent Techniques for Web Personalization* (pp. 7-12), Seattle, WA, 2001.
73. P. Domingos and G. Hulten, "Catching Up with the Data: Research Issues in Mining Data Streams," in *Proceedings of the 2001 Workshop on Research Issues in Data Mining and Knowledge Discovery* (pp. 47-51), Santa Barbara, CA, 2001.

74. T. Lau, P. Domingos and D. Weld, "Learning How to Edit Text," in *Proceedings of the AAAI 2000 Fall Symposium on Learning How to Do Things* (pp. 41-46), Cape Cod, MA, 2000.

75. A. Doan, P. Domingos and A. Halevy, "Learning Mappings between Data Schemas," in *Proceedings of the AAAI-2000 Workshop on Learning Statistical Models from Relational Data* (pp. 1-6), Austin, TX, 2000.

76. A. Doan, P. Domingos and A. Levy, "Learning Source Descriptions for Data Integration," in *Proceedings of the Third International Workshop on the Web and Databases* (pp. 81-86), Dallas, TX, 2000.

77. T. Lau, P. Domingos and D. Weld, "Intelligent macros for text-editing," in *Proceedings of the IUI-2000 Workshop on Using Plans in Intelligent User Interfaces* (pp. 4-6), New Orleans, LA, 2000.

78. P. Domingos, "Data Pre-Processing for Cost-Sensitive Learning," in *Proceedings of the ICML-99 Workshop: From Machine Learning to Knowledge Discovery in Databases* (pp. 17-25), Bled, Slovenia, 1999.

79. P. Domingos, "Process-Oriented Evaluation: The Next Step," in *Proceedings of Uncertainty '99: The Seventh International Workshop on Artificial Intelligence and Statistics* (pp. 51-58), Ft. Lauderdale, FL, 1999.

80. P. Domingos, "How to Get a Free Lunch: A Simple Cost Model for Machine Learning Applications," in *Proceedings of the AAAI-98/ICML-98 Workshop on the Methodology of Applying Machine Learning* (pp. 1-7), Madison, WI, 1998.

81. P. Domingos, "Multimodal Inductive Reasoning: Combining Rule-Based and Case-Based Learning," in *Proceedings of the AAAI 1998 Spring Symposium on Multimodal Reasoning* (pp. 135-140), Stanford, CA, 1998.

82. P. Domingos, "Bayesian Model Averaging in Rule Induction," in *Preliminary Papers of the Sixth International Workshop on Artificial Intelligence and Statistics* (pp. 157-164), Ft. Lauderdale, FL, 1997.

83. P. Domingos, "Using Partitioning to Speed Up Specific-to-General Rule Induction," in *Proceedings of the AAAI-96 Workshop on Integrating Multiple Learned Models for Improving and Scaling Machine Learning Algorithms* (pp. 29-34), Portland, OR, 1996.

84. P. Domingos, "Exploiting Context in Feature Selection," in *Proceedings of the ICML-96 Workshop on Learning in Context-Sensitive Domains* (pp. 15-20), Bari, Italy, 1996.

85. P. Domingos, "From Instances to Rules: A Comparison of Biases," in *Proceedings of the Third International Workshop on Multistrategy Learning* (pp. 147-154), Harpers Ferry, WV, 1996.

TECHNICAL REPORTS AND UNREFEREED PUBLICATIONS

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