William W. Cohen

Center for Automated Learning and Discovery Carnegie-Mellon University Pittsburgh, PA, 15213

Professional Experience:

- May 2003—present. Associate Research Professor, Center for Automated Learning and Discovery, Carnegie-Mellon University, Pittsburgh, PA.
- July 2002–May 2003. Visiting Associate Professor, Center for Automated Learning and Discovery, Carnegie-Mellon University, Pittsburgh, PA.
- April 2000–May, 2002. Distinguished Research Scientist, Whizbang Labs, Pittsburgh, PA.
- September 1990—April 2000. Member Technical Staff, AT&T Bell Laboratories, Murray Hill NJ; Principle Research Staff Member, AT&T Labs-Research, Florham Park NJ.

Education:

- **Ph.D.** in Computer Science. Rutgers University, New Brunswick, New Jersey. August 1990. Doctoral thesis, *Explanation Based Generalization as an Abstraction Mechanism for Concept Learning*, under the direction of Dr. Alex Borgida.
- M.S. in Computer Science. Rutgers University, New Brunswick, New Jersey. May 1988.
- B.S. in Computer Science. Duke University, Durham, North Carolina. May 1984.

Relevant publications:

- **2002** W. Cohen, M. Hurst and L. Jensen, "A Flexible Learning System for Wrapping Tables and Lists in HTML Documents", in *Proceedings of the Eleventh International World Wide Conference (WWW-2002)*.
- **1998** W. Cohen, "Hardness Results for Learning First-Order Representations and Programming by Demonstration", *Machine Learning*, 30(1), pp 57–88.
- 1994 W. Cohen, "Grammatically Biased Learning: Learning Logic Programs Using an Explicit Antecedent Description Language", Artificial Intelligence, Vol 68, pp 303-366.

Other representative publications (of 93):

- 1999 W. Cohen, Y. Singer, "Context-sensitive learning methods for text categorization", in *ACM Transactions on Information Systems*, 17(2), Apr 1999, pages 171-173.
- 1999 W. Cohen and Y. Singer, "A Simple, Fast, and Effective Rule Learner", in *Proceedings, Seventeenth National Conference on Artificial Intelligence* (AAAI-99).
- 1999 W. Cohen, Y. Singer, R. Schapire, "Learning to Order Things", in *Journal of Artificial Intelligence Research*, 10, 1999, pp 243-270.

1995 W. Cohen, "Fast Effective Rule Induction", in *Machine Learning, Proceedings of the Twelfth Inter*national Conference (ICML-95). (There are 177 citations to this paper in ResearchIndex.)

Professional Service:

- November 2001—present. Director of the International Machine Learning Society.
- September 2001—present. Action Editor for The Journal of Machine Learning Research.
- January 1997—September 2001. Action Editor for the journal Machine Learning.
- January 1995—December 1997. Associate Editor for the Journal of Artificial Intelligence Research.
- March 1998. With Jaime Carbonell and Yiming Yang (of CMU), editor of special issue of the journal *Machine Learning* on the topic "machine learning and information retrieval".
- Co-chair of the 1994 International Machine Learning Conference.
- Area chair for ML-2000, SIGIR-2001, and SIGIR-2002; Senior PC member, AAAI-2004.
- Member of program committees for KDD-2003, SIGMOD-2002, NIPS-2002, ICML-2002, ICML-2001, SIGIR-2001, WWW-2000, ILP-2000, SIGIR-99, WWW-99, ILP-99, COLT-98, ML-97, ILP-97, AAAI-96, ALT-96, ILP-95, ILP-94, AAAI-93, and ML-93, and various specialized workshops.

Invited Talks and Seminars:

- October 2002, invited talk, "Exploiting Document Structure in Information Extraction and Document Classification", McKay Distinguished Lecture, University of California, Berkeley.
- October 2001, invited talk, "Issues in Extracting Information from the Web", at the 7th International Workshop on Parsing Technologies, Sponsored by ACL/SIGPARSE, Bejing, China.
- December 2000, invited talk, "Learning Using the Web as Background Knowledge", at the Eleventh International Conference on Algorithmic Learning Theory, Sydney, Australia.
- June 1999, keynote address, "What can we learn from the Web?" at the 16th International Conference on Machine Learning, Bled, Slovenia.
- March 1996, invited talk, "What the Well-Informed IR Researcher Should Know About Machine Learning", at the 1996 AAAI Spring Symposium on Machine Learning and Information Access, Palo Alto, CA.
- September 1995, invited talk, "Learning to Classify English Text with ILP Methods", at the Fifth International Workshop on Inductive Logic Programming, Leuven, Belgium.

Patents and Patent Applications:

- A system and method for accessing heterogeneous databases. Patent #6,295,533.
- A system and method for finding information in a distributed information system using query learning and meta search. Patent # 5,347,623.
- Rule induction on large noisy data sets. Patent # 5,719,692.
- Software discovery system. Patent # 5,642,472.
- Biased learning system. Patents # 5,481,650 and # 5,627,945.