

Larry Denenberg
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Employment

Consultant, Nevo Technologies. Algorithm development, followed by implementation in C# and XAML, in several areas, including: design and evaluation of investment strategies for daytraders; detailed modelling and analysis of home energy use to identify potential savings. [October 2009 – present]

Chief Scientist; HireReach Inc. Analysis of web page content to find matches with employers' required professional skills, determining optimum placement of advertising. Implementation in Perl and .NET technologies (C#, XAML, SQL). [January 2010 – present]

Co-founder and CTO; Oxy Systems Inc. Third-party applications for mobile phones, with server- and cloud-side features and support. Implementation in J2ME. [March 2003 – present]

Member; Board of Overseers Committee to Visit the College, Harvard University. [September 2001 – June 2006]

CTO; Speech Portal Division, Comverse Network Systems. Speech recognition enhancements to service offerings. [August 1999– November 2002]

Adjunct Faculty, Division of Applied Sciences, Harvard University. [September 1997 – June 1998]

Co-founder and CTO; InTouch Systems Inc. Speech recognition consulting and applications. Company acquired by Comverse Technologies. [March 1996 – August 1999]

Senior Scientist; BBN Systems and Technologies. Speech recognition systems and applications. [October 1991 – March 1996]

Consultant; University of Istanbul. Computer reconstruction of the city of Istanbul from the court records of the Ottoman Empire. [June 1991 – September 1992]

Associate; Division of Applied Sciences, Harvard University. [June 1985 – June 1991]

Senior Software Architect; Network Analysis Division, BBN Communications. Algorithms for construction and analysis of packet-switched networks. [November 1984 – October 1991]

Technical reviewer; R. J. Brady Publishing. [December, 1982 – June, 1985]

Education

PhD, Applied Mathematics, Harvard University, 1984

SM, Applied Mathematics, Harvard University, 1980

AB *magna cum laude*, Applied Mathematics, Harvard University, 1977

Publications

- “Online Median Finding,” <http://denenberg.com/omf.pdf>, in review, 2010
- Solutions Manual to Accompany *Data Structures and Their Algorithms*, with Harry Lewis, HarperCollins, 1992
- Data Structures and Their Algorithms*, with Harry Lewis, HarperCollins, 1991
- “Definability by constant-depth polynomial-size circuits,” with Yuri Gurevich and Saharon Shelach, *Information and Control* **70**, 1986 (this paper establishes my Erdős number)
- “The complexity of the satisfiability problem for Krom formulas,” with Harry Lewis, *Theoretical Computer Science* **30**, 1984
- “Bounds for EMVD inference,” Harvard University Technical Report #25-84, 1984
- “Logical syntax and computational complexity,” with Harry Lewis, in *Proceedings, Logic Colloquium 1983*, Aachen
- “A problem hard for nondeterministic time n^k ,” with Harry Lewis, in *Proceedings, 19th Annual Allerton Conference on Communication, Control, and Computing*, 1981
- “A note on Savitch’s theorem,” Harvard Technical Report #25-81, 1981
- “The implementation of PDP-11 ECL,” Harvard Technical Report #29-77, 1977

US Patents

- “Active prompts,” #6724864, issued April 20 2004
- “Entering names via keypad,” #6728348, issued April 27 2004
- “Automatic dynamic speech recognition vocabulary based on external sources of information,” #6937986, issued August 30 2005
- “Method of assessing degree of acoustic confusability,” #7013276, issued March 14 2006
- “Voice application bookmarks,” #7158936, issued January 2 2007
- “Personal server,” pending

Teaching (partial list)

- Math 22, Discrete Mathematics, Fall 2003, Tufts University
- Computer Science 124, Data Structures and Algorithms, Spring 1998, Harvard University
- Math E-117, Advanced Discrete Mathematics, Spring 1993, Harvard University Extension
- CSCI E-124, Algorithms, Fall 1992, Harvard University Extension
- Applied Sciences 11: Computers, Algorithms, and Programs, Fall 1982, Harvard University
- Applied Math 110: Introduction to Programming, 1979, 1980, 1981, Harvard University

Avocations

Recreational dancer, dance instructor, and performer; bicyclist and hiker; bibliophile; private pilot. Authority on the works of Rafael Sabatini. Competency in Hebrew.