

Curriculum Vitae

Harold S. Stone

Residence: 639 W. Lake Sammamish Parkway, NE, Bellevue WA 98008

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Date of Birth: 10 August 1938

Place of Birth: St. Louis, Missouri

Citizenship: US

Education

Princeton	1956-1960	BSE	EE
Univ. of California, Berkeley	1960-1961	MSE	EE
Univ. of California, Berkeley	1961-1963	Ph. D.	EE

Awards and Honors.

Summa Cum Laude, Princeton, 1960

Whiton Scholarship, Princeton, 1958-1959

Phi Beta Kappa, Princeton, 1960

Sigma Xi, Princeton, 1960

Sigma Xi Book Award, Princeton, 1960

Bigelow Prize, Princeton, 1960

NSF Fellow, University of California, 1960-1963

Distinguished Visitor, IEEE Computer Society, 1971-1973, 1979-1980.

ACM National Lecturer, 1973-1975

Tau Beta Pi, U of Massachusetts, 1981

IEEE Fellow, 1986.

Charles Babbage Award, 1991. Citation: "In recognition of his exceptional contributions to the evolution of computer architecture and high performance computing."

Best Paper in Track, ICCD, 1992.

IEEE Emanuel Piore Award, 1992. Citation: "For fundamental contributions to parallel computer technology, and to computer science education."

ACM Fellow, 1994.

IEEE Computer Society Taylor Booth Education Award, 1999. Citation: "for outstanding contributions in advancing computer science and engineering education through your research, teaching and most important through innovative writing of seminal textbooks that established the computer architecture on a firm foundation. "

Areas of Research Activities

Image Data Bases, Image Registration, and Image Searching

Optical interconnections for computer systems

Computer Architecture

Distributed Processing

Image Processing

Parallel Algorithms

Microprocessor Systems

Operating Systems
Combinatorial Algorithms
Computer-aided Design of VLSI Networks

Positions Held

Fellow, NEC Research Institute, 8/94 - 4/01 (retired).
Research Staff Member, IBM, 1/90 to 7/94.
Manager, Advanced Architecture Studies, IBM, 9/84 to 1/90.
Adjunct Professor, Courant Institute of Mathematics, 1/85 to 6/90.
Professor, Electrical and Computer Engineering Department, University of Massachusetts, 9/74 to 8/84.
Associate Professor of Computer Science and Electrical Engineering, Stanford University, 9/70 to 8/74.
Acting Associate Professor of Computer Science and Electrical Engineering, Stanford University, 10/68-6/69 and 10/69-6/70. (On leave from SRI International.)
Research Engineer, SRI International, Menlo Park, California, 11/63-12/68.
Research Engineer, Boeing, Seattle, Washington, 7/63-11/63.

Visiting Positions

Visiting Professor, Cornell University, Electrical Engineering Department, 1992-1993.
Guest Lecturer in Computer Architecture, Ecole Polytechnique Federal de Lausanne, 10/91.
Guest Lecture Series, Electrotechnical Laboratory, Tsukuba, Japan, 12/87.
Visiting Lecturer, IBM Japan, 7/82-8/82.
Visiting Professor, University of California, Berkeley, California, 9/77-6/78.
Visiting Professor, University of Sao Paulo, Sao Paulo, Brazil, 7/75-8/75.
Guest Lecturer, IRIA, Paris, France, 6/74.
Visiting Scientist, Institute for Computer Applications in Science and Engineering, NASA Langley Research Center, Hampton, VA, 6/74-6/79.
NASA Visiting Research Fellow, NASA Ames Research Center, Mt. View, California, 9/73-6/74.
Guest Lecturer, Technical University of Berlin, 6/73-7/73.
OAS Lecturer, Universidad de Chile, Santiago, Chile, 7/72-8/72.
NASA ASEE Fellow, NASA Ames Research Center, Mt. View, CA, 6/71-9/71.
Lecturer in Communications, IBM, San Jose, CA, 6/66-7/66.

Consultantships

Expert Consultant, Nelson, Bumgardner, and Casto, 5/11 to present testifying in Stragent V. Intel. Civil Action no. 6:11-CV-421.(testified on behalf of Stragent)
Expert Consultant, Williams, Morgan, and Amerson, 1/11 to 3/12
Expert Consultant, Quinn Emanuel, 10/10 to 4/13, testifying in Microunity v. Apple et al., No. 02:10-cv-91-LED-RSP (testified on behalf of Qualcomm, LG, Huawei, and Google)
Expert Consultant, Finnegan-Henderson, 8/10 to present, testified in TSC v. Mountcastle, et al., No. 1:10-cv-00901-TSE-TC. (testified on behalf of TSC), testifying in Biax v. Motorola Solutions, Inc et al., Civil Action No. 10-cv-03013-PAB-KLM (testified on behalf of Biax). testifying in VIA *et al.* v. Apple before the ITC, action 337-TA-812 (testified on behalf of VIA)
Expert Consultant, Nix, Patterson, and Roach, 12/11 to 3/12.
Expert Consultant, Barcelo, Harrison, and Walker, 12/11 to 3/12.
Expert Consultant, Irell and Manella, 12/11 to 5/12.

Expert Consultant, Perkins-Coie, 5/10 to 5/11.

Expert Consultant, Alston and Bird, 12/09 to 5/12, testifying in AIT v. Dell, No. 5:07 CV 426-H (testified on behalf of Dell).

Expert Consultant, Irell and Manella, 11/08-11/09, testifying in WARF v. Intel, 3:08-cv-00078-bbc (W.D. Wisc), (testified on behalf of WARF).

Expert Consultant, Bartlit Beck Herman Palenchar and Scott, 11/07 to present, testifying in Convolve/MIT v. Seagate/Compaq, No. 00 CIV 5141 (GBD) (testified on behalf of Compaq).

Expert Consultant, Williams, Morgan, and Amerson, 11/06 to 11/08, testifying in BIAx v. Fujitsu and Sun Microsystems, No. 2:06-CV-364-TJW (testified on behalf of BIAx).

Expert Consultant, Ropes and Gray, 9/06 to 11/07, testifying in Convolve/MIT v. Seagate/Compaq, No. 00 CIV 5141 (GBD) (testified on behalf of Compaq)..

Consulting Editor for Prentice-Hall Publishing, 1999 to 2010.

Consultant, Los Alamos National Laboratory, NIS Division, 12/01 to 1/04; ISR Division, 1/04 to 2006; N Division, 1/04 to 2005.

Expert Consultant, McDermott, Will, and Emery, 11/05 to 2/07, testifying in BIAx v. Philips, No. 337-TA-559 (ITC) (testified on behalf of BIAx).

Expert Consultant, Finnegan Henderson Farabow Garrett and Dunner, 3/05 to 4/09, testifying in BIAx v. Intel and ADI, No. 02-05-CV-184-TJW (E.D. Tex) (testified on behalf of BIAx, in Lofgren v. Prutchi, Patent Interference No. 105,581 (JL), (Technology Center 2800) (testified on behalf of Prutchi (Boston Scientific)), in Paradox v. ADT/DSC, No. 2:06-CV-00462-TJW (E.D. Tex) (testified on behalf of DSC, in BIAx v. Analog Devices, AAA Matter No. 11 181 Y 00186 09 (testified on behalf of BIAx); and author of declaration in Reexamination of US Patent 5,077,733 to Whipple, docket 04747.0177-00; litigation consulting 9/10 to 11/11.

Expert Consultant, Weil, Gotshal, and Manges, 1/03 to 5/04, testifying in Mangosoft, Inc. v. Oracle Corp., No. 02-545-JM (D.N.H.) (testified on behalf of Oracle).

Expert Consultant, Amster, Rothstein, and Ebenstein, 8/03 to 12/06.

Expert Consultant, Irell and Manella, 2/03 to 1/05.

Expert Consultant, Howrey, Simon, 8/02 to 1/07.

Consultant, NASA Goddard Space Flight Systems, 4/01 to 12/04.

Expert Witness, Fish and Neave, 1/02 to 4/03, testifying in Intel Corp v. Via Tech, No. A-01-CA602-SS (W.D. Tex.) (testified on behalf of Via Tech).

Consulting Editor for PWS Publishing Series in Computer Architecture, 1993-1999.

Consulting Editor for Addison/Wesley Series in Microcomputers, 1983-1992.

Consultant, IBM Watson Research Center, 9/83-8/84.

Consultant, Unidata Systems, Inc., 6/82-6/84.

Consultant, Sperry Systems Management, Great Neck, NY, 6/82-8/84.

Consultant, Assurance Technology, Carlisle, MA, 6/82-8/84.

Consultant, IBM Federal Systems Division, 5/83-6/83.

Consultant, IBM Watson Research Center, 1/82-5/82.

Member of Advisory Committee, Solo Systems, Sunnyvale, CA, 4/82.

Consultant, IBM Federal Systems Division, 8/81-9/81.

Consultant, Assurance Technology, Carlisle, MA, 4/81-12/81.

Consultant, Sky Computer, Lowell, MA, 4/81-6/81.

Consulting Editor, University Microfilms, 12/80-12/85.

Consulting Researcher, Sperry Research Center, Sudbury, MA, 6/80-2/81.

Consultant, Sperry Systems Management, Great Neck, NY, 4/80-1/82.

Consultant, Gartner Group, Greenwich, CT, 5/80-6/81.

Consultant, Georgia Institute of Technology Engineering Station, 1/80 to 6/80.

Consultant, GTE Sylvania, Needham Heights, MA, 7/79.
Consultant, The Analytic Sciences Corporation, Reading MA, 7/79.
Consulting Editor and Series Editor, McGraw-Hill, 1978-12/83.
Consultant, Dean-Witter Reynolds, New York, 1978-1979.
Consultant, Douglas Peterson and Assoc., Greenfield, MA, 1978-1981.
Consultant, Monolithic Memories, Sunnyvale, CA, Inc., 1978
Consultant, GE Naval Ordnance Systems, Pittsfield MA, 1977.
Consultant, US Army CORADCOM, Fort Monmouth, NJ, 1975-1980.
Consultant, Imagetics, Inc., Greenfield, MA, 1975-1977
Member of Advisory Committee, Hewlett-Packard, 1975-1976.
Consultant, Hewlett-Packard, 1970-1974, and 1975-1978.
Consultant, Systems Control, Inc., Palo Alto, CA 1970-1973 and 1975-1977.
Consultant, Wolf Management Services (now Systems Control, Inc.), 1969-1970.
Consultant, SRI International, Menlo Park, CA, 1968-1969.
Consultant, Precision Instruments, Palo Alto, CA, 1968.
Consultant, Data Technology Corporation, Mt. View, CA, 1967-1970.
Consultant, RAND Corporation, Santa Monica, CA, 1962-1963.

Professional Societies

IEEE
ACM
SPIE

Professional Activities

Session Organizer, 2000 Conference on Information Sciences and Systems, March, 2000
Member, NSF Panel, Next Generation Software Panel, 1999
Guest Co-Editor, IEEE Communications Magazine, January 1999
Member, Program Committee, 1999 Workshop on High-Speed Interconnections with Digital Computers
Member, Program Committee, Conference on Applications for Digital Libraries, 1995-1999
Member, Program Committee, 1998 International Super Computer Symposium
Member, Program Committee, 1998 ICCV Workshop on Content-Based Access of Image/Video Library Data
Speaker and Participant, 1998 NIH Lung Imaging Workshop on Technology Transfer
Member, Program Committee for 1997 Image Registration Workshop
Member, IEEE Awards Committee (Corporate Recognition and Best Papers), 1996-2000
Member, NSF Panel, Opportunities for Multidisciplinary Research, 1995
Chair, Science Council, Center of Excellence in Space Data and Information Sciences, 1995-1997.
Chair, Search Committee for Director of Center of Excellence in Space Data and Information Sciences, 1994.
Member, National Research Council, ONR Panel for Computer Science, 1994.
Member, NSF Committee of Visitors, Computer and Computing Research, 1993.
Program Committee Organizer, Workshop on Interconnections within High-Speed Digital Systems, 1993.
Member, NSF Research Infrastructure Awards Panel, 1993.
Member, IEEE Fellows Selection Committee, 1992-1995.
Member, Science Council, Center of Excellence in Space Data and Information Sciences, 1992-1994.
Vice President, Publications, IEEE Computer Society, 1992.

Session Organizer, Workshop on Interconnections within High-Speed Digital Systems, 1992.
 Member, NSF Presidential Faculty Award Selection Committee, 1992.
 Chair, Transactions Advisory Committee, IEEE Computer Society, 1991
 Session Organizer, Workshop on Interconnections within High-Speed Digital Systems, 1991
 Member, NSF Presidential Young Investigator Selection Committee, 1991.
 Program Chair, Workshop on Interconnections within High-Speed Digital Systems, 1990
 Track Chair, ACM Critical Issues Conference, 1990
 Member, IEEE Hamming Award Selection Committee, 1990
 Chair, Audit Committee, Computer Society Governing Board, 1989-90.
 Member, IEEE Computer Society Governing Board, 1986-1992
 Associate Editor, *IEEE Transactions on Parallel and Distributed Systems*, 1989-1993
 Chair, Technical Committee on Interconnections within High-Speed Digital Systems, 1989-1990
 Chair, IEEE Tab Awards and Recognition Committee, 1990
 Member, NSF PYI Selection Panel, 1989, 1991
 Member, Marist College Computer Selection Advisory Committee, 1988-1989
 Member, ACM/IEEE Eckert-Mauchly Award Committee, 1988-1990.
 Member, IEEE Tab Awards Committee, 1989
 Member, IEEE Fellows Committee, Computer Society Representative, 1988-1990.
 Chair, IEEE Kobayashi Field Award, 1987-1989.
 Member Audit Committee, Computer Society Governing Board, 1988.
 NSF Site Review Committee, Engineering Research Center Selection, 1988.
 Member, NSF Coordinated Equipment for Research Selection Panel, Feb. 1986, Feb. 1987.
 Member, Dartmouth College Advisory Committee, 1986-1987.
 Member, NSF Presidential Young Investigator Panel, 1985
 Member, NSF Advisory Committee, Manufacturing, Design, and Computer Engineering, 1985-1986
 Member Visiting Committee, University of Texas, Electrical and Computer Engineering Department, 1985-1986.
 Member, NSF Research Initiation Grant Selection Panel, 1985.
 Program Chairman, 1986 Fall Joint Computer Conference
 North American Conference Chairman, 13th Annual Computer Architecture Symposium, 1986.
 Panelist, Review of ONR funding of Artificial Intelligence Research, National Academy of Science, 1985-1986.
 Co-Chair and Author, IEEE Task Report on Research Priorities in Computer and Communication Research, 1985.
 Program Committee Member, International Conference on Computers and Applications, Peking, China, 6/84.
 Panelist, Study on International Developments, National Academy of Science, 1/83-12/85.
 Panelist, Study on Chemical and Biological Sensor Technology, National Academy of Science, 4/83-1/84.
 Panel Chairman, Distributed Systems Research, NSF Workshop on Future Directions in Computer Research, 1/83.
 Member, Advisory Panel on Computer Engineering, National Science Foundation, 1981-1983.
 Editorial Board, Proceedings of the IEEE, 2/81-12/84.
 Member, Computer Science Board, National Academy of Sciences, 1979-1984.
 Panelist, Study in Research Paradigms of Computer Science, National Academy of Sciences, 1980-1982.
 Panelist, NSF Workshop on Future Directions of Computer Engineering Research, 11/81.

Member, and coauthor of proposal accepted by, IEEE Computer Society Floating-Point Standardization Committee, 1978-1982.
Session Organizer and Session Chairman, Electro '80, May 1980.
Guest Editor, Issue on Military Computer Family Architecture, *Computer*, April 1979.
Chairman, Eckert-Mauchly Award Committee, IEEE CS and ACM, 1979-1981
Member, Awards Committee, IEEE Computer Society, 1980-1981
Member, Governing Board, IEEE Computer Society, 1979-1980. Advisor, IEEE Computer Society, Computer Tutorial Series, 1978.
Program Committee, Sixth Annual Computer Architecture Symposium, April 1978.
Program Committee, Fifth Annual Computer Architecture Symposium, April 1977.
ECDP Accreditation Team visitor, 1976.
Member, IEEE Piore Award Committee, 1976-1978.
Editorial Board, *J. ACM*, 1976 to 1980.
Workshop Committee, Distributed Processing Workshop, Brown University, August 1976.
Program Chairman, Fourth Annual Computer Architecture Symposium, April 1977.
Chairman, Hardware Systems Panel, Computer Science and Engineering. Research Study (COSERS), 1974-1976.
Member, Advisory Panel on Computer Science and Engineering, National Science Foundation, 1974-1977.
Program Committee, Sagamore Conference on Parallel Computation, August 1973.
Program Committee, Second Annual Symposium on Computer Architecture, January 1975.
Program Committee, First Annual Symposium on Computer Architecture, December 1973.
Program Committee, Symposium on Sequential and Parallel Numerical Algorithms, May 1973.
Guest Editor, Special Issue on Parallel Computation, *IEEE Trans. on Computers*, August 1973.
Board of Directors, SIGARCH, ACM, 1974-1976.
Chairman, Technical Committee on Computer Architecture, IEEE Computer Society, 1972-1973.
Workshop Chairman, Parallel Computation Workshop, June 1972.
Chairman, Best Papers Awards Committee, IEEE Computer Society, 1974 to 1977.
Member, Governing Board, IEEE Computer Society, 1973-1974.
Chairman, San Francisco Chapter, IEEE Computer Society, 1972-1973.
Vice-Chairman, San Francisco Chapter, IEEE Computer Society, 1971-1972.
Technical Editor, *Computer*, IEEE Computer Society, 1971-1973.
Review Editor, *IEEE Computer Transactions*, 1966-1969.

Editor and Reviewer of Manuscripts

500 manuscripts reviewed, 1970-1995 for:

Addison-Wesley
Allyn and Bacon
John Wiley and Sons
Mayfield Press
McGraw-Hill
MacMillan
Prentice Hall
Prindle, Webster, and Smith
Science Research Associates
Springer Verlag

Consulting Editor for PWS

1 book in the series

Consulting Editor for McGraw-Hill Computer Science Series

14 books in the series
Consulting Editor for University Microfilms Series in
Artificial Intelligence
Distributed and Data Base Systems
Systems Programming
Computer Architecture

76 books in the series
Consulting Editor for Addison-Wesley
5 books in the series

Directorships and Corporate Affiliations.

Director, EZ Data Systems, Newington, NH, 1981-1983
President and Director of The Interfactor, Inc., 1980-1993

Bibliographical Information

Books and Book Chapters

1. *Image Registration for Remote Sensing*, J. LeMoigne, *et al.*, eds, Cambridge University Press, 2011. (One chapter by H. S. Stone, co-author of two other chapters).
2. Stone, H. S., "Content-based image retrieval — Research issues," Chapter 9 of *Recent Advances in Multimedia*, B. Sheu and M. Ismail, editors, IEEE Press, pp. 282-322, 1998
3. Stone, H. S., *High-Performance Computer Architecture*, Addison-Wesley, Reading MA, 1987. Second edition, 1990. Third edition, 1993.
4. Stone, H. S., *Microcomputer Interfacing*, Addison-Wesley, Reading MA, 1982.
5. *Introduction to Computer Architecture*, Harold S. Stone, ed., Science Research Associates, Palo Alto, 1975. 2nd Edition, 1980. (Two chapters by Harold S. Stone).
6. Stone, H. S., and D. P. Siewiorek, *Introduction to Computer Organization and Data Structures, PDP-11 Edition*, McGraw-Hill, New York, 1975.
7. Stone, H. S., *Discrete Mathematical Structures and Their Applications*, Science Research Associates, Palo Alto, 1973.
8. Stone, H. S., *Introduction to Computer Organization and Data Structures*, McGraw-Hill, New York, 1972.
9. *Recent Advances in Switching Theory*, A. Mukhopadhyay, ed., Academic Press, New York, 1971. (Two chapters by H. S. Stone)

Patents

1. Natarajan, K. S., and H. S. Stone, "Adaptive mechanisms for execution of sequential decisions," US Patent 4,752,890, 21 June 1988.
2. Natarajan, K. S., A. Mukerjee, and H. S. Stone, "Device to assist adaptive reordering of sequential decisions," U. S. Patent No. 4,843,567 issued on 27 June 1989.
3. Stone, H. S., "A technique for parallel synchronization within a multilevel switch," U. S. Patent No. 4,989,131 issued on 29 Jan. 1991.
4. Stone, H. S., "Reducing the cache-reload transient at a context swap," U. S. Patent No. 5,065,310 issued on 11 Nov. 1991.
5. Bregman, M. R., I. C. Noyan, M. B. Rittter, and H. S. Stone "Optical bus for computer systems," U. S. Patent No. 5,093,890 issued on 3 March 1992.
6. Stone, H. S., and J. L. Wolf, "A method and apparatus for calculating disk-access footprints," U. S. Patent No. 5,142,670 issued on 25 Aug. 1992.

7. Brantley, W. C., and H. S. Stone, "A low-cost combining switch for reducing access to memory and for synchronizing parallel processes," U. S. Patent No. 5,163,149 issued on 10 Nov. 1992.
8. Natarajan, K. S., and H. S. Stone, "Adaptive mechanisms for execution of sequential decisions," European Patent EP0254825 issued on 19 January 1994.
9. Li; Chung-Sheng, Karen Liu, H. S. Stone, and F. K. Tong, "Interconnections having improved signal-to-noise ratio," U. S. Patent No. 5,357,363 issued on 18 Oct. 1994.
10. Stone, H. S., and J. L. Wolf, "A method and apparatus for calculating disk-access footprints," European Patent EP0352462 issued on 30 Aug. 1995.
11. Stone, H. S., "A technique for parallel synchronization," European Patent EP0352490 issued on 29 November 1995.
12. Brantley, W. C., and H. S. Stone, "Method for implementing a combining switch for support parallel processing," European Patent EP0366865 issued on 27 December 1995.
13. Heidelberger; Philip, and H. S. Stone, "Methods and apparatus for performing a write/load cache protocol," U. S. Patent No. 5,611,070 issued on 11 March 1997.
14. Stone, H. S., and J. M. Stone, "Method for updating value of shared variable," Japanese Patent JP2500101(B2) issued on 1 March 1996.
15. Stone, H. S. "Method and apparatus for multi-resolution image searching," European Patent EP0806733 B1, issued on July 9, 2003.
16. Cox, I., M. L. Miller, and H. S. Stone, "Method for determining a ranked set of associations," U. S. Patent No. 5,734,592 issued on 31 Mar. 1998.
17. Stone, H. S., and J. M. Stone, "Posting multiple reservations with a Conditional Store atomic operation in a multiprocessing environment," U. S. Patent No. 5,742,785 issued on 21 April 1998.
18. Puzak, T. R., and H. S. Stone, "Operand prefetch table," U. S. Patent No. 5,790,823 issued on 4 Aug. 1998.
19. Stone, H. S., and T. Shamoan, "Method for computing correlation operations on partially occluded data," U. S. Patent No. 5,867,609 issued on 2 February, 1999.
20. Stone, H. S., "Method and apparatus for multi-resolution image searching," U. S. Patent No. 5,933,546, issued on 3 August, 1999.
21. Cox, I., M. L. Miller, and H. S. Stone, "Method for determining a ranked set of associations," Japanese Patent JP3152279 issued on 3 April 2001.
22. Stone, H. S., "Progressive JPEG Decoding," U. S. Patent No. 6,259,820, issued on 10 July, 2001.
23. Stone, H. S., M. F. Sakr, and M. B. Reinhold, "Method for Prefetching Structured Data," U. S. Patent No. 6,311,260, issued on 30 October 2001.
24. Stone, H. S., and T. W. Ebbesen, "Apparatus and method for transmitting data between VLSI chips," U. S. Patent 6,362,907, issued on 26 March 2002.
25. Stone, H. S. M. T. Orchard, E.-C. Chang, and S. A. Martucci, "Method for subpixel registration of images", U. S. Patent 6,628,845, issued on 30 September 2003.
26. Stone, H. S., R. Wolpov, "Method for blind cross-spectral image registration," U. S. Patent 7,103,234, issued on 5 September 2006.
27. Stone, H. S., M. F. Sakr, and M. B. Reinhold, "Method for Prefetching Structured Data," European Patent EP 1,031,919 B1, issued on 8 October 2008.

Refereed Journal Articles

1. Stone, H. S., M. McGuire, and B. Tao, "Analysis of image registration noise due to rotationally dependent aliasing," *J. Vis. Commun. Image. R.* 14, pp. 114-135, 2003.

2. Artigas, F., J. S. Cho, S. A. Chun, R. Holowczak, and H. S. Stone, "An experimental study of content-based image classification for satellite image data bases," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 40, no. 6, pp. 1338-1347, June, 2002.
3. Stone, H. S., and R. Wolpov, "Blind cross-spectral registration using prefiltering and Fourier-based translation detection," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 40, no. 3, pp. 637-650, March, 2002.
4. Stone, H. S., M. Orchard, E.-C. Chang, and S. Martucci, "A fast direct Fourier-based algorithm for subpixel registration of images," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 39, no. 10, pp. 2235-2243, October, 2001
5. McGuire, M., and H. S. Stone, "Techniques for multiresolution image registration in the presence of occlusions," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 38, no. 3, pp. 1476-1479, May, 2000.
6. Stone, H. S., J. Le Moigne, and M. McGuire, "The translation sensitivity of wavelet-based registration," *IEEE Transactions on Pattern Recognition and Machine Intelligence*, vol. 21, no. 10, pp. 1074-1080, Oct., 1999.
7. Stone, H. S., "Progressive wavelet correlation using Fourier techniques," *IEEE Transactions on Signal Processing*, vol. 47, no. 1, pp. 97-107, January 1999.
8. Stone, H. S., "Image libraries and the internet," *IEEE Communications Magazine*, Vol. 37, no. 1, pp. 99-109, January 1999 and guest editorial, same issue, pp. 70-71 (with C.-S.Li).
9. Stone, H. S., "Convolution theorems for linear transforms," *IEEE Transactions on Signal Processing*, vol. 46, no. 10, pp. 2819-2821, October, 1998
10. Stone, H. S., and T. Shamoan, "Search by content of partially occluded images," *International Journal on Digital Libraries*, vol. 1, no. 4, pp. 329-343, December, 1997. A preliminary version of these results were reported in the paper "The use of image content to control image retrieval and image processing," by H. S. Stone and T. Shamoan, presented at the Sixth NEC Research Symposium, Tokyo, June, 1995.
11. Miller, M. L, H. S. Stone, I. Cox, "Optimizing Murty's ranked assignment method," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 33, no. 3, pp. 851-862, July, 1997.
12. McDiarmid, C., T. Johnson, and H. S. Stone, "On finding a minimum spanning tree in a network with random weights," *Journal of Random Structures and Algorithms*, vol. 10, no. 1-2, pp. 187-204, January-March, 1997.
13. Stone, H. S., "Designing in the multimedia era," *IEEE Design and Test*, pp. 6-7, Winter, 1996 (invited paper).
14. Stone, J. M., H. S. Stone, P. Heidelberger, and J. Turek, "Multiple reservations and the Oklahoma update," *IEEE Parallel and Distributed Technology*, Vol. 1, no. 4, pp. 58-71, November, 1993.
15. Li, C.-S., H. S. Stone, Y. Kwark, and C. M. Olsen, "Fully differential optical interconnections for high-speed digital systems," *IEEE Transactions on VLSI Systems*, Vol. 1, no. 2, pp. 151-163, June., 1993. (Longer version of a paper that appeared in extended abstract form in 1992 ICCD.)
16. Li, C.-S., and H. S. Stone, "Differential board/backplane interconnects for high-speed digital systems, part I. Theory," *IEEE Journal of Lightwave Technology*, vol. 11, No. 7, pp. 1234-1249, July, 1993.
17. Stone, H. S., "Copyrights and author responsibilities," *Computer*, vol. 25, no. 12, pp. 46-51, December, 1992.
18. Stone, H. S., J. L. Wolf, and J. Turek, "Optimal partitioning of cache memory," *IEEE Trans. on Computers*, vol. 41, no. 9, pp. 1054-1068, September, 1992.
19. Singh, J. P., H. S. Stone, and D. F. Thiebaut, "An analytical model of fully associative cache memories," *IEEE Trans. on Computers*, vol. 41, no. 7, pp. 811-825, July, 1992.

20. Thiebaut, D. F., H. S. Stone, and J. L. Wolf, "Improving disk cache hit-ratios through cache partitioning," *IEEE Transactions on Computers*, vol. 41, no. 6, pp. 665-676, June, 1992.
21. Thiebaut, D. F., H. S. Stone, and J. L. Wolf, "Synthetic traces for trace-driven simulation of cache memories," *IEEE Trans. on Computers*, Vol. 41, No. 4, pp. 288-310, April, 1992.
22. Stone, H. S., and J. Cocke, "Computer architecture in the 1990s," *Computer*, vol. 24, no. 9, pp. 30-38, September, 1991.
23. Stone, H. S., "Optimal search policies for searches with I/O bound tasks," *IEEE Trans. on Computers*, September 1989.
24. Stone, H. S., "Parallel querying of large databases: a case study," *Computer*, vol. 20, no. 10, pp. 11-21, October, 1987.
25. Thiebaut, D. F., and H. S. Stone, "Footprints in the cache," *ACM Transactions on Computing*, Vol. 5, No. 4, pp. 305-329, November, 1987. (Longer version of paper that appeared in *Proc. of Performance '86*.)
26. Stone, H. S., and J. M. Stone, "Efficient search techniques—An empirical study of the N -Queens Problem," *IBM Journal of Research and Development*, vol. 31, no. 4 pp. 464-474, July, 1987.
27. Stone, H. S., and P. Sipala, "The complexity of depth-first search," *IBM Journal of Research and Development*, Vol. 30, no. 3, pp. 242-258, May 1986.
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Sample of Invited Talks

1. Keynote Speech, ICCD '96, Austin Texas, October 1996.
2. Keynote Speech, Workshop on High-Speed Interconnections within Digital Systems, Santa Fe, New Mexico, May, 1996.
3. Stone, H. S., "Fourier domain techniques for image querying," Centre for Advanced Studies Conference, Toronto, November, 1995.
4. Stone, H. S., "Pattern matching of remote-sensing data," Tutorial in CESDIS Distinguished Lecture Series, October, 1995.
5. Keynote Speech, "Image processing and its impact on computer architecture", 1995 High-Performance Computer Architecture Symposium, March, 1995, and at Santa Fe Workshop on High-Speed Interconnections within Digital Systems, May, 1995.