

Resume

Der-Tsai Lee

December 2007

- Present Position** Distinguished Research Fellow & Director, Institute of Information Science, Academia Sinica, Taipei, Taiwan since July 1998.
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e-mail: dtlee@iis.sinica.edu.tw
- Education** Ph.D., 1978, Computer Science, University of Illinois at Urbana-Champaign.
M.S., 1976, Computer Science, University of Illinois at Urbana-Champaign.
B.S., 1971, Electrical Eng., National Taiwan University, Taipei, Taiwan.
- Research Interests** Design and analysis of algorithms, computational geometry, web-based computing, algorithm visualization, compliant controller for active suspension/vibration control, digital libraries, bioinformatics, and software security.
- Work Experience** 1973-74, Teaching Assistant in Electrical Engineering Dept., National Taiwan University.
1974-75, Research Assistant in Computer Science Dept., University of Illinois at Urbana-Champaign.
1975-78, Research Assistant in Coordinated Science Lab. University of Illinois at Urbana-Champaign.
1978-81, Assistant Professor, Department of Electrical Engineering and Computer Science, Northwestern University.
1981-86, Associate Professor, Department of Electrical Engineering and Computer Science, Northwestern University.
Sept. 1984 - March 1985, Research Professor, Institute of Information Science, Academia Sinica, Taipei, Taiwan. (On leave from Northwestern University)
Sept. 1984 - March 1985, Adjunct Professor, Dept. of Information Engineering and Computer Science, National Taiwan University, Taipei, Taiwan. (On leave from Northwestern University)
1986-96, Professor, Department of Electrical Engineering and Computer Science, Northwestern University.
1996-99, Professor, Department of Electrical and Computer Engineering Northwestern University.
1998- present, Distinguished Research Fellow & Director, Institute of Information Science, Academia Sinica.

**Work Experience
(cont'd)**

- 2000- present, Professor (Joint Appointment), Department of Computer Science and Information Engineering, Graduate Institute of Electronics Engineering, National Taiwan University.
- 2003- present, Professor (Adjunct Appointment), Department of Computer Science and Information Engineering, National Chiao-Tung University.
- 2003- 2006, Chief Executive Officer, Program Office, National Digital Archives Program, National Science Council, <http://www.ndap.org.tw>.
- 2004- present, Distinguished Research Fellow (Joint Appointment), Genomics Research Center, Academia Sinica.
- 2006- 2009, Chair Professor, National Taiwan University of Science and Technology.
- 2007- present, Acting Director
Research Center for Information Technology Innovation, Academia Sinica.
- 2007- present, Director, Taiwan Information Security Center,
- 2008- 2011, Computer Science Chair Professor, National Chung-Hsing University
Research Center for Information Technology Innovation, Academia Sinica.
- 1977, 1979, Summer Visitor at IBM T. J. Watson Research Center, Yorktown Heights, NY.
- 1977, 1979, Consultant for General Electric Co. at Daytona Beach, FL.
- 1982, Consultant for IBM T. J. Watson Research Center, Yorktown Heights, NY.
- 1985-1989, Consultant for Southern Forest Experiment Station, USDA, New Orleans, LA.
- August 1989 - August 1990, Program Director, Division of Computer and Computation Research, National Science Foundation, Washington, D. C. (On leave from Northwestern University.)
- July 1991, Distinguished Visiting Scholar, Ministry of Education, Culture and Sciences of Japan, visiting Tohoku University, Osaka Electro-Communication University and University of Tokyo.
- June 1992, Senior Lecturer, Fibonacci Institute, Trento, Italy.
- April 1994 - June 1998, Advisory Committee Member, Institute of Information Science, Academia Sinica, Taipei, Taiwan.
- June 1996, Invited Lecturer, Summer Institute on Computing, Academia Sinica, Nankang, Taiwan.
- 1999- 2000, Information Technology Advisor, Army Headquarters, Taiwan.
- 1999- 2003, Science & Technology Advisor, National Telecommunication Project Program Office, Taiwan.
- 2000- 2002, Member, Standing Committee, Institute of Information & Computing Machinery, Taiwan.
- 2002- 2006, President, Institute of Information & Computing Machinery, Taiwan.
- 2000 - 2007, Member, Innovation Advisory Committee, Institute of Information Industry, Taiwan.
- 2000- 2003, Member, Executive Board of Directors, Institute for Information Industry, Taiwan.
- 2003- present, Member, Board of Directors, Institute for Information Industry, Taiwan.
- 2001- present, Member, Medical Informatics Development Committee, Department of Health, Executive Yuan, Taiwan.

Professional Activities

Reviewer for National Science Foundation, National Sciences & Engineering Research Council of Canada, National Science Council, Ministry of Education, Academia Sinica, and Foundation for the Advancement of Outstanding Scholarship of Taiwan, Research Grants Council of Hong Kong.

Panelist National Science Foundation, Office of Naval Research.

Organizer of Workshop on Computational Complexity, Academia Sinica, Taipei, Taiwan, Sept. 4-6, 1988.

Program Committee Member for Fifth Symposium on Computational Geometry, June 1989.

Program Committee Member for Int'l Computer Symposium, Dec. 1990 & Dec. 1992.

Program Committee Member for 1991 Symposium on Algorithms, Dec. 1991.

Chair, Int'l Workshop on Algorithms and Discrete Mathematics, Guangzhou, China, Dec. 1994.

Program (Video Submission) Committee Member for Symposium on Computational Geometry, June 1995.

Program Committee Member for Second Annual Int'l Computing and Combinatorics Conference, June 1996.

Co-Chair, Third Annual Int'l Computing and Combinatorics Conference, August 1997.

Program Committee Member for WADS'97, August 1997.

Program Committee Member for ISAAC'98, December 1998.

Co-Chair, Fifth Annual Int'l Computing and Combinatorics Conference, July 1999.

Program Committee Member for WADS'99, August 1999.

Program Committee Member for Sixth Annual Int'l Computing and Combinatorics Conference, July 2000.

Chair, Eleventh Annual Int'l Symposium on Algorithms and Computation, December 2000.

Program Committee Member for Seventh Annual Int'l Computing and Combinatorics Conference, July 2001.

Program Committee Member, ICALP, July 2002.

Chair, APEC Workshop on e-Learning and Digital Archives, Dec. 2002.

**Professional Activities
(cont'd)**

- Chair, International Conference on Digital Archive Technologies, Dec. 2002.
- Program Committee Member, Ninth Annual Int'l Computing and Combinatorics Conference, July 2003.
- Local Advisory Committee Member, 2003 Carnahan Conference on Security Technology, Oct. 2003.
- Program Chair, 2004 IEEE International Conference on Networking, Sensing and Control, March 2004.
- Chair, APEC Workshop on Digital Resource Sharing, March 2004.
- Chair, International Conference on Digital Archive Technologies, March 2004.
- General Chair, IEEE 2004 International Conference on Multimedia and Expo, June 2004.
- Program Committee Member, Int'l Conference on Knowledge Management, July 2004.
- General Chair, 2nd Asian Symposium on Programming Languages and Systems, Nov. 2004.
- Program Committee Member, Workshop on Computational Geometry and Applications, May 2005.
- Program Committee Member, Int'l Conference on Knowledge Management, July 2005.
- General Co-Chair, ACM Symposium on Information, Computer and Communications Security, March 2006.
- Program Committee Co-Chair, International Conference on Algorithmic Applications in Management, June 2006.
- Program Committee Member, International Symposium on Combinatorics, Algorithms, Probabilistic and Experimental Methodologies, ESCAPE 2007, April 7-9, 2007.
- Program Committee Member, 4th Annual Conference on Theory and Applications of Models of Computation, May 22-25, 2007.
- Program Committee Member, 4th ISVD International Symposium on Voronoi Diagrams, July 9-12, 2007.
- Program Committee Member, Frontiers of Algorithms Workshop 2007, August 1-5, 2007, Lanzhou, China.
- Program Committee Member, 18th Annual Int'l Symposium on Algorithms and Computation, Dec. 17-19, 2007.

Professional Activities
(cont'd)

Program Committee Member, Frontiers of Algorithms Workshop 2008, June 19 - 21, 2008, Changsha, China.

General Chair, International Security Conference, Taipei, Taiwan, Sept. 2008.

General Chair, Cultural Mondo Round Table, IV, Taipei, Taiwan, Sept. 2008.

Editorship

Editor of *IEEE Trans. on Computers*, October, 1991- Dec. 1995.

Chief Editor of *Int'l Journal of Foundations of Computer Science*, Jan. 1990 - March 1999.

Editor of *NETWORKS*, June 1991- Dec. 1999.

Editor of *The ACM Journal of Experimental Algorithmics*, May 1995 - Dec. 1999.

Chief Editor of *Journal of Information Science and Engineering*, August 2000 -Dec. 2006.

Editor of *Algorithmica*, Aug. 1985 - present.

Editor of *Computational Geometry: Theory and Applications*, Jan. 1990 - 2006.

Chief Editor of *Int'l Journal of Computational Geometry & Applications*, Jan. 1991 - present.

Editor of *ACM Journal on Computing and Cultural Heritage*, June 2006 - present.

Editor of *LNCS Transactions on Computational Science*, Jan. 2007 - present.

Editor of *Int'l J. of Information and Computer Security*, Jan. 2007 - present.

Member, Advisory Board of *Journal of Information Science and Engineering*, Jan. 2007 - present.

Member, Advisory Board of *The ACM Journal of Experimental Algorithmics*, Jan. 2000 - present.

Series Editor of *Lecture Notes Series on Computing*, World Scientific Publishing Co., Inc., July 1990 - present.

Honors & Awards

Fellow Institute of Electrical and Electronics Engineers, 1992.

Fellow Association for Computing Machinery, 1997.

Outstanding Research Award Pan Wen-Yuan Foundation, 2001 for contributions to computational geometry and its applications to VLSI circuit layout, routing, and manufacturing.

Information Science Honorary Medal Institute of Information and Computing Machinery, Taiwan, Jan. 2002.

Outstanding Information Science Specialist Award IT Month, Taiwan, Dec. 2002.

Academician Academia Sinica, 2004.

Humboldt Research Award Alexander von Humboldt Stiftung/Foundation, Germany, 2007.

Patents

- Method and system for determining critical area for circuit layouts using Voronoi diagrams, (with E. Papadopoulou) U.S. Patent No. 6178539, January 2001.
- Nonlinear Muscle-Like Compliant Controller, (with C-H Wu), US Patent No. 6,243,624 B1, June 2001.
- An Intelligent System for Regulating the Speed of an Electric Motorcycle, (with C-H Wu), US Patent No. 6,324,464 B1, Nov. 2001.
- An Intelligent System for Regulating the Speed of an Electric Vehicle, (with C. H. Wu) ROC Patent No. 089105820, June 2002.

Publications

Book: Algorithmic Aspects of VLSI Layout (Edited with M. Sarrafzadeh), World Scientific Publishing Co., Singapore, 1993.

Book: Computer Security in the 21st Century (Edited with S. Shieh and D. Tygar), Springer, New York, NY., pp. 268, 2005

Copyright: GeoSheet: A Distributed Visualization Tool for Geometric Algorithms, Registration number: TXu 695-628, United States Copyright Office, July 24, 1995.

1. "An Algorithm for Transformation of an Arbitrary Switching Function to a Completely Symmetric Function," (with S.J. Hong), *IEEE Trans. Computers*, Nov. 1976, 1117-1123.
2. "Location of a Point in a Planar Subdivision and Its Applications," (with F.P. Preparata), *SIAM J. Comput.*, Sept. 1977, 594-606.
3. "Worst Case Analysis for Region and Partial Region Searches in Multidimensional Binary Search Trees and Balanced Quad Trees," (with C.K. Wong), *Acta Informatica* 9, 1977, 23-29.
4. "The All Nearest Neighbor Problem for Convex Polygons," (with F.P. Preparata), *Info. Proc. Lett.*, June 1978, 189-192.
5. "An Optimal Algorithm for Finding the Kernel of a polygon," (with F.P. Preparata), *J. ACM*, July 1979, 415-421.
6. "An Optimal Solution for the Channel-Assignment Problem," (with U. Gupta and J. Y-T. Leung), *IEEE Trans. Comput.*, Nov. 1979, 807-810.
7. "Voronoi Diagrams in L_1 -(L_∞ -) Metrics with 2-Dimensional Storage Applications," (with C.K. Wong), *SIAM J. Comput.*, Feb. 1980, 200-211.
8. "A Note on the All Nearest Neighbor Problem for Convex Polygons," (with C.C. Yang), *Info. Proc. Lett.*, April 1979, 193-194.
9. "Location of Multiple Points in Planar Subdivision," (with C.C. Yang) *Info. Proc. Lett.*, Nov. 1979, 190-193.
10. "Two Algorithms for Constructing Delaunay Triangulations," (with B. Schachter), *Int. J. Comput. and Info. Sci.*, Vol. 9, No. 3, June 1980, 219-242.
11. "Quintary Trees: A File Structure for Multidimensional Database Systems," (with C.K. Wong), *ACM Trans. Database System*, Vol. 1, No. 3, Sept. 1980, 339-353.
12. "Two Dimensional Voronoi Diagrams in the L_p -metric," *J. ACM*, Oct. 1980, 604-618.
13. "An $O(n \log n)$ Heuristic Algorithm for the Rectilinear Steiner Minimal Tree Problem," (with J.M. Smith and J.S. Liebman), *Engineering Optimization*, Vol. 4, No. 4, 1980, 179-192.
14. "Generalization of Voronoi Diagram in the Plane," (with R.L. Drysdale), *SIAM J. Comput.*, Feb. 1981, 73-87.
15. "Record Allocation for Minimizing Expected Seek Delay Time," (with U. Gupta, J. Y-T. Leung, J. Pruitt and C.K. Wong), *Theoretical Comput. Sci.*, 16, 1981, 307-319.
16. "An $O(n \log n)$ Heuristic for Steiner Minimal Tree Problems on the Euclidean Metric," (with J.M. Smith and J.S. Liebman), *Networks*, Vol. 11, 1981, 23-29.
17. "An On-Chip Compare/Steer Bubble Sorter," (with H. Chang and C.K. Wong), *IEEE Trans. Comput.*, Vol. C-30, June 1981, 396-404.

18. "Finding Intersection of Rectangles by Range Search." (with C.K. Wong), *J. Algorithms*, 2, 1981, 337-347.
19. "Number of Vias: A Control Parameter for Global Wiring of High Density Chips," (with S.J. Hong and C.K. Wong), *IBM J. Res. and Develop.*, Vol. 25, No. 4, July 1981, 261-271.
20. "On k -Nearest Neighbor Voronoi Diagrams in the Plane," *IEEE Trans. Comput.*, Vol. C-31, No. 6, June 1982, 478-487.
21. "Medial Axis Transformation of a Planar Shape," *IEEE Trans. Pattern Anal. and Machine Intelligence*, Vol. PAMI-4, No. 4, July 1982, 363-369.
22. "Ranking and Unranking of 2-3 Trees," (with U. Gupta and C.K. Wong), *SIAM J. Comput.*, Vol. 11, No. 3, Aug. 1982, 582-590.
23. "An Improved Algorithm for the Rectangle Enclosure Problem," (with F.P. Preparata), *J. Algorithms*, 3,3 Sept. 1982, 218-224.
24. "An Optimal Illumination Region Algorithm for Convex Polygons," (with C.B. Silio, Jr.), *IEEE Trans. Comput.*, Vol. C-31, No. 12, Dec. 1982, 1225-1227.
25. "Efficient Algorithms for Interval Graphs and Circular-arc Graphs," (with U. Gupta and J. Y-T. Leung), *Networks*, Vol. 12 (1982), 459-467.
26. " (g_0, g_1, \dots, g_k) -Trees and Unary 0L Systems," (with C.L. Liu and C.K. Wong), *Theoretical Comput. Sci.*, 22 (1983), 209-217.
27. "Visibility of a Simple Polygon," *Computer Vision Graphics and Image Processing*, 22, (1983) 207-221.
28. "Dynamic Voronoi Diagrams," (with I.G. Gowda, D.G. Kirkpatrick and A. Naamad), *IEEE Trans. Info. Theory*, IT-29, No. 5, Sept. 1983, 724-731.
29. "Maximum Clique Problem of Rectangle Graphs," in Advances in Computing Research, Vol. 1, ed. F.P. Preparata, JAI Press Inc., 1983, 91-107.
30. "Ranking and Unranking of B-Trees," (with U. Gupta and C.K. Wong), *J. Algorithms*, 4, 1983, 51-60.
31. "On the X-Y Convex Hull of a Set of X-Y polygons," (with T.Y. Nicholl, Y.Z. Liao and C.K. Wong) *BIT*, 23, 1983, 456-471.
32. "On Finding the Convex Hull of a Simple Polygon," *Int'l J. Comput. and Infor. Sci.*, Vol. 12, No. 2, April 1983, 87-98.
33. "On 2-Dimensional Channel Assignment Problem," (with J. Y-T. Leung), *IEEE Trans. Comput.*, Vol. C-33, No. 1, Jan. 1984, 2-6.
34. "On Maximum Empty Rectangle Problem," (with A. Naamad and W.L. Hsu), *Discrete Appl. Math.*, 8, 1984, 267-277.
35. "On a Circle-Cover Minimization Problem," (with C.C. Lee), *Info. Proc. Lett.*, 18 Feb. 1984, 109-115.
36. "An Optimal Time and Minimal Space Algorithm for Rectangle Intersection Problems," *Int'l J. Comput. and Info. Sci.*, 13,1 Feb. 1984, 23-32.
37. "Euclidean Shortest Paths in the Presence of Rectilinear Barriers," (with F.P. Preparata), *Networks*, vol. 14, 1984, 393-410.

38. "A Visibility Problem in VLSI Layout Compaction," (with M. Schlag, F. Luccio, P. Maestrini and C.K. Wong), in Advances in Computing Research, Vol. 2, ed. F.P. Preparata, JAI Press Inc., 1984, 259-282.
39. "Graph Algorithms on a Tree-Structured Parallel Computer," (with D.Y. Yeh), *BIT*, 24, 1984, 333-340.
40. "Computational Geometry: A Survey," (with F.P. Preparata), *IEEE Trans. Comput.*, Vol. C-33, 12, Dec. 1984, 1072-1101.
41. "The Power of Geometric Duality," (with B. Chazelle and L.J. Guibas), *BIT*, 25, (1985), 76-90.
42. "Display of Visible Edges of a Set of Convex Polygons," (with I.M. Chen) in Computational Geometry, ed. G.T. Toussaint, North-Holland, 1985, 249-265.
43. "On Finding the Diameter of a Set of Lines," (with Y.T. Ching), *Pattern Recognition*, 18,3/4, 1985, 249-255.
44. "The Power of Geometric Duality Revisited," (with Y.T. Ching), *Infor. Proc. Lett.*, 21 (1985), 117-122.
45. "A Simple On-Line Bin Packing Algorithm," (with C.C. Lee) *J. ACM*, 32,3, July 1985, 562-572.
46. "Computing the Relative Neighborhood Graph in the L_1 -metric," *Pattern Recognition*, 18,5 1985, 327-332.
47. "On a Circle Placement Problem," (with B.M. Chazelle), *Computing*, 36(1-2), 1986, 1-16.
48. "Computing the Largest Empty Rectangle," (with B. Chazelle and R.L. Drysdale), *SIAM J. Comput.*, (15,1) Feb. 1986, 300-315.
49. "Computational Complexity of Art Gallery Problems," (with A.K. Lin), *IEEE Trans. Infor. Theory*, (IT-32,2) March 1986, 276-282.
50. "Computing Visibility Polygon from an Edge," (with A.K. Lin), *Computer Vision Graphics and Image Processing*, (34) 1986, 1-19.
51. "Geometric Complexity of Some Location Problems," (with Y.F. Wu), *Algorithmica*, (1) 1986, 193-211.
52. "On-Line Bin Packing in Linear Time," (with P. Ramanan, D.J. Brown and C.C. Lee), *J. Algorithms*, 10, 1989, 305-326.
53. "Generating Binary Trees of Bounded Height," (with C.C. Lee and C.K. Wong), *Acta Informatica*, (23) 1986, 529-544.
54. "Generalized Delaunay Triangulation for Planar Graphs," (with A.K. Lin), *Discrete & Comput. Geom.* 1 (1986) 201-217.
55. "Rectilinear Shortest Paths with Rectangular Barriers," (with P. de Rezende and Y.F. Wu) *Discrete & Comput. Geom.*, (4,1) 1989, 41-53.
56. "An Efficient New Algorithm for 2D line Clipping: Its Development and Analysis," (with T.M. Nicholl and R.A. Nicholl), *SIGGRAPH 1987*, July 1987, 253-262.
57. "Parallel Batched Planar Point Location on the CCC," (with F. P. Preparata), *Info. Proc. Lett.*, (33) 1989, 175-179.
58. "A New Approach to Topological Via Minimization," (with M. Sarrafzadeh) *IEEE Trans. Computer-Aided Design*, (8,8) Aug. 1989, 890-900.

59. "Parallel Geometric Algorithms on a Mesh Connected Computer," (with C.S. Jeong), *Algorithmica*, (5,2) 1990, 155-177.
60. "Planar Subset of Multi-terminal Nets," (with K.F. Liao and M. Sarrafzadeh), *INTEGRATION: The VLSI Journal*, (10,1) Sept. 1990, pp. 19-37.
61. "Minimum Cut for Circular-arc Graphs," (with M. Sarrafzadeh and Y.F. Wu), *SIAM J. Comput.*, (19,6) Dec. 1990, 1041-1050.
62. "Shortest Rectilinear Paths among Weighted Rectangles," (with C. D. Yang and T. H. Chen), *J. Information Processing*, (13,4) 1990, 456-462.
63. "Out-of-Roundness Problem Revisited," (with V.B. Le), *IEEE Trans. Pattern Analysis & Machine Intelligence*, (13,3) March 1991, 217-223.
64. "Shortest Rectilinear Paths among Weighted Obstacles," (with C. D. Yang and T. H. Chen), *Int'l J. Computational Geometry & Applications*, (1,2) June 1991, 109-124.
65. "Minimum Diameter Spanning Trees and Related Problems," (with J.M. Ho, C.H. Chang and C.K. Wong), *SIAM J. Comput.*, (20,5) October 1991, 987-997.
66. "Topological Via Minimization Revisited," (with M. Sarrafzadeh), *IEEE Trans. Comput.*, (40,11) Nov. 1991, 1307-1312.
67. "An Optimal Algorithm for the Maximum Two-Chain Problem," (with R. D. Lou and M. Sarrafzadeh), *SIAM J. Discrete Algorithms.*, (5,2) May 1992, 285-304.
68. "On Bends and Length of Rectilinear Paths: A Graph-Theoretic Approach," (with C. D. Yang, and C. K. Wong), *Int'l J. Computational Geometry & Applications*, (2,1) March 1992, 61-74.
69. "Parallel Enclosing Rectangle on SIMD Machines," (with C. S. Jeong, J. J. Choi), *Parallel Computing*, 18,2 1992, 221-229.
70. "1-segment Center Problems," (with H. Imai, and C.D. Yang), *ORSA J. Computing.*, (4,4) Fall 1992, pp. 426-434.
71. "Maximum Independent Set of a Permutation Graph in K Tracks," (with M. Sarrafzadeh), *Int'l J. Comput. Geometry & Applications*, (3,3) Sept. 1993, 291-304.
72. "The All-Pairs-Quickest Path Problem," (with E. Papadopoulou), *Information Processing Letters*, 45 (1993), 261-267.
73. "Minimal Link Visibility Paths inside a Simple Polygon," (with M. Alsuwaiyel), *Computational Geometry: Theory and Applications*, 3, 1, (1993) 1-26.
74. "Restricted Track Assignment with Applications," (with M. Sarrafzadeh), *Int'l J. Comput. Geometry & Applications*, (4,1) March 1994, 53-68.
75. "On Bends and Distances of Paths among Obstacles in Two-Layer Interconnection Model," (with C. D. Yang, and C. K. Wong), *IEEE Trans. Comput.*, (43,6) June 1994, 711-724.
76. "Dot Pattern Matching in d -Dimensions," (with P. J. deRezende), *Algorithmica*, (13,4) April 1995, 387-404.
- *77. "On Steiner Tree Problem with 45° Routing," (with C. F. Shen and C. L. Ding), *Prof. IEEE Int'l Symp. on Circuits and Systems*, May 1995, 1960-1982.
78. "Rectilinear Path Problems Among Rectilinear Obstacles Revisited," (with C. D. Yang and C. K. Wong), *SIAM J. Computing*, (24,3) June 1995, 457-472.

79. "Parallel Algorithms on Circular-Arc Graphs," (with M. G. Andrews) *Computational Geometry: Theory and Applications*, 5,3 (1995), 117-141.
80. "Finding an Approximate Minimum-Link Visibility Path Inside a Simple Polygon," (with M. H. Alsuwaiyel) *Info. Processing Letters*, 55 (1995) 75-79.
81. "An Optimal Algorithm for Shortest Paths on Weighted Interval and Circular-Arc Graphs with Applications," (with M. J. Atallah and D. Z. Chen), *Algorithmica*, (14,5) Nov. 1995, 429-441.
82. "An Optimal Algorithm for Roundness Determination on Convex Polygons," (with K. Swanson and V. L. Wu) *Computational Geometry: Theory and Applications*, (5,4) Nov. 1995, 225-235.
83. "A Faster Algorithm for Rubber-Band Equivalent Transformation for Planar VLSI Layouts" (with Hsiao-Feng S. Chen) *IEEE Trans. Computer-Aided Design*, (15,2) Feb. 1996, 217-227.
84. "Rectilinear Paths among Rectilinear Obstacles," (with C. D. Yang and C. K. Wong) *Discrete Applied Math.*, 70 (1996), 185-215.
85. "Computational Geometry," invited paper, *ACM Computing Surveys*, (28,1) March 1996, 27-31.
86. "Computational Geometry," book chapter in The Computer Science and Engineering Handbook, Ed. A. B. Tucker, CRC Press, 1996, 111-140.
87. "Geometric Algorithm Visualization, Current Status and Future," Applied Computational Geometry, Eds. Lin and Manocha, LNCS No. 1148, Springer-Verlag, 1996, pp. 45-50.
- *88. "The Steiner Minimal Tree Problem in the λ -geometry Plane," (with C. F. Shen), *Proc. 7th Int'l Symposium on Algorithms and Computations*, Osaka, Japan, Dec. 1996, pp. 247-255.
89. " k Best Cuts for Circular-Arc Graphs," (with K. H. Tsai), *Algorithmica*, (18,2) June 1997, 198-216.
90. "The Smallest Pair of Non-Crossing Paths in a Rectilinear Polygon," (with C. D. Yang and C. K. Wong) *IEEE Trans. Comput.* (46,8) August 1997, 930-941.
91. "Finding Rectilinear Paths among Obstacles in a Two-Layer Interconnection Model," (with C. D. Yang and C. K. Wong) *Int'l J. Comput. Geometry & Applications*, (7,6) Dec. 1997, pp. 581-598.
92. "Two Guard Walkability of Simple Polygons," (with L. H. Tseng and P. Heffernan), *Int'l J. Comput. Geometry & Applications*, (8,1) Feb. 1998, 85-116.
93. "A New Approach for the Geodesic Voronoi Diagram of Points in a Simple Polygon and Other Restricted Polygonal Domains," (with E. Papadopoulou) *Algorithmica*, (20,4) April 1998, 319-352.
94. "GeoSheet: A Distributed Visualization Tool for Geometric Algorithms," (with S.-M. Sheu and C.-F. Shen) *Int'l J. Comput. Geometry & Applications*, (8,2) April 1998, 119-155.
95. "On Crossing Minimization Problem," (with H.-F. Steven Chen) *IEEE Trans. Computer-Aided Design*, (17,5):406-418, May 1998.
96. "Solving the All-Pair Shortest Path Query Problem on Interval and Circular-Arc Graphs," (with D. Z. Chen, R. Sridhar and C. N. Sekharan) *Networks*, (32,4): 249-257, Dec. 1998.
97. "Two-Way and Multi-Way Partitioning a Set of Intervals for Clique-Width Maximization," (with A. H. Farrahi and M. Sarrafzadeh) *Algorithmica*, (23,3), March 1999, 187-210.
98. "Critical Area Computation via Voronoi Diagrams," (with E. Papadopoulou) *IEEE Trans. Computer-Aided Design*, (18,4):463-474, April 1999.

99. "Skew Voronoi Diagram," (with O. Aichholzer, F. Aurenhammer, D. Z. Chen and E. Papadopoulou) *Int'l J. Comput. Geometry & Applications*, (9,3) June 1999, 235-248.
100. "Computational Geometry I & II," book chapters in Algorithms & Theory of Computation Handbook, Ed. M. J. Atallah, CRC Press, 1999.
- *101. "A Web-based Distributed Programming Environment," (with K. Aoki) *Proc. 8th Int'l Conference on High Performance Computing and Networking Europe 2000*, Amsterdam, Netherlands, May 2000.
- *102. "The State-of-the-Art and Prospect of Information Science & Engineering Research of the Academia Sinica," *IT in Taiwan*, ed. D. Lin, The Infopro Group Inc., & Opentimes News Agency, 2000, 66-71.
- *103. "Computing and Combinatorics: Foreword," (with T. Jiang) *Theoretical Comput. Sci.*, (240,2) June 2000, 255.
- *104. "Content Management of Academia Sinica Digital Library," (with J-M. Ho and Shih-Kun Huang) *Prof. 3rd Int'l Conf. on Sinology*, Academia Sinica, June 29- July 1, 2000.
- *105. "DAViD: A Distributed Algorithm Visualization and Debugging Eystem for Geometric Computing," (with L. H. Lin and K. Aoki) *Prof. 3rd Int'l Conf. on Human and Computer 2000*, Univ. of Aizu and Waseda Univ., Japan, Sept. 6-9, 2000.
106. "Parallel Algorithms for Maximum Matching in Complements of Interval Graphs and Related Problems," (with M. G. Andrews, M. J. Atallah and D. Z. Chen) *Algorithmica*, (26,2) 2000, 263-289.
107. "On Creation and Management of Digital Libraries: System Environment, Human-Computer Interface and Research Issues," (with J-M. Ho, Shih-Kun Huang and Tyng-Ruey Chuang) *J. Library & Information Science*, (26,2) Oct. 2000, 38-48.
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