

**References:**

- [1] [Abb89] EL Abbadi, A. and Toueg, S. "Maintaining availability in partitioned replicated databases". ACM Trans. Database Syst. 14, 2 (June), pp. 264-290, 1989.
- [2] [Agraw90] Agrawal, D. and EL Abbadi, A. "The tree quorum protocol: An efficient approach for managing replicated data". In Proceedings of the 16th International Conference on Very Large Data Bases (VLDB, Brisbane, Australia, Aug. 13-16), D. McLeod, R. Sacks-Davis, and H. Schek, Eds. Morgan Kaufmann Publishers Inc., San Francisco, CA, pp.243-254, 1990.
- [3] [Agraw97] Agrawal, D. and EL Abbadi, A., and Steinke. R. "Epidemic algorithms in replicated databases (extended abstract)". In Proceedings of the 16th ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS '97, Tucson, AZ, May 12-14), A. Mendelzon and Z. M. Ozsoyoglu, Chairs. ACM Press, New York, NY, pp. 161-172, 1997.

- [4] [Alon97] Alonso, G., Reinwald, B., and Mohan, C. "Distributed data management in workflow environment". In Proceedings of the 13th International Conference Workshop on Research Issues in Data Engineering. RIDE, Birmingham, UK, Apr. IEEE Computer Society, Washington, DC. 1997.
- [5] [Alsb76] Alsberg, P. and Day, J. "A principle for resilient sharing of distributed resources". In Proceedings of the International Conference on Software Engineering. San Francisco, CA, Oct. pp.562-570, 1976.
- [6] [Ande98] Anderson, T., Breitbart, Y., Korth, H. F., and Wool, A. "Replication, consistency, and practicality: Are these mutually exclusive?". In Proceedings of ACM SIGMOD International Conference on Management of Data (SIGMOD '98, Seattle, WA, June 1-4), A. Tiwary and M. Franklin, Eds. ACM Press, New York, NY, pp. 484-495, 1998.
- [7] [Ape88] Apers, Peter M. G. "Data Allocation in Distributed Database Systems". ACM Transactions on Database Systems, 13(3), September, pp.263-304, 1988.

- [8] [Atze00] Atzeni, P., Cabibbo l., and Mecca G., "Database Cooperation: Classification and Middleware Tools". Journal of Database Management; Apr-Jun, pp. 2- 11; ABI/INFORM Global, 2000.
- [9] [Babb79] Babb, E. "Implementing a relational database by means of specialized hardware". ACM Transactions on Database Systems 4, 1 (March), pp. 1-29, 1979.
- [10] [Bae03] Bae K., Kim J., and Huh S. "Federated process framework in virtual enterprise using an object-oriented database and extensible markup language". Journal of Database Management; Jan-Mar. 14, 1; ABI/INFORM Global. Pg. 27, 2003.
- [11] [Bar86] Barkmeyer, E., Mitchell, M., Mikkilineni, K., Su, S. Y. W., and Lam, H. "An architecture for an integrated manufacturing data administration system". NBSIR 863312, Md. 86, National Bureau of Standards, Gaithersburg, 1986.
- [12] [Bern80] Bernstein, P., Shipman, P., and Rothnie, J. "Concurrency control in System for distributed database (SDD-1)". ACM Trans. Database Sys., Dec. 5(1): pp.18-51, 1981.

- [13] [Bern81] Bernstein, P., Goodman, N., Wong, E., Reeve, C., and Rothnie, J. "Query processing in a system for distributed database systems" 6,4 (Dec.), pp. 602-625, 1981.
- [14] [Bern87] Bernstein, P., Hadzilacos, V., and Goodman, N. "Concurrency Control and Recovery in Database Systems". Addison-Wesley Longman Publ. Co., Inc., Reading, MA., 1987.
- [15] [Blak96] Blakeley, A. "Thoughts on Directions in Database Research", ACM computer Surveys 28A(4), December. 1996.
- [16] [Blan91] Blankinship, R. "An Iterative Method for Distributed Database Design". Ph.D. Dissertation, University of Maryland at College Park, 1991.
- [17] [Borr88] Borr, A. "High Performance SQL through Low-Level System Integration". In Proceedings of the ACM SIGMOD Int. Conf. on Management of Data, June, pp. 342-349, 1988.

- [18] [Brau99] Braumandl, R., Kemper, A., and Kossmann, D. "Database patchwork on the internet (project demo description)". In Proceedings of the ACM SIGMOD Conference on Management of Data (Philadelphia, PA, June), pp. 550-552, 1999.
- [19] [Bre85] Breitbart, Y., and Tieman, L. "ADDS: Heterogeneous distributed database system". In Distributed Data Sharing Systems. F. Schreiber and W. Litwin, Eds. North Holland Publishing Co. The Netherlands, pp. 7-24, 1985.
- [20] [Bre86] Breitbart, Y., Olson, P., and Thompson, G. "Database integration in a distributed heterogeneous database system". In Proceedings of the International Conference on Data Engineering (Los Angeles, CA, Feb. 5-7). IEEE, Washington, D.C., pp. 301-310, 1986.
- [21] [Bre97] Breitbart, Y., and Korth, H. "Replication and consistency: being lazy helps sometimes". In Proceedings of the 16th ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS '97, Tucson, AZ, May 12-14), A. Mendelzon and Z. M. Ozsoyoglu, Chairs. ACM Press, New York, NY, pp.173-184, 1997.

- [22] [Bre99] Breitbart, Y., Komondoor, R., Rastogi, R., and Silberschatz, A. "Update propagation protocols for replicated databases". In Proceedings of the ACM Conference on Management of Data (SIGMOD '99, Philadelphia, PA, June). ACM Press, New York, NY, pp. 97-108, 1999.
- [23] [Brun95] Brunstrom. A., Scott T., and Rahul S. "Experimental Evaluation of Dynamic Data Allocation Strategies in a Distributed Database with Changing Workloads". CIKM, pp. 395-402, 1995.
- [24] [Care86] Carey, M. and Hongjun L. "Load Balancing in a Locally Distributed Database System". Proceedings of the ACM-SIGMOD International Conference on Management of Data, Washington, D.C., pp. 108-119, 1986.
- [25] [Care91] Carey M. and Livny, "Conflict Detection Tradeoffs for Replicated Data" , ACM Transactions on Database Systems 16/4, Dec. 1991.
- [26] [Care97] Carey, M. and Kossmann, D. "On saying "enough already!" in SQL". In Proceedings of the ACM SIGMOD Conference on Management of Data (Tucson, AZ, May), pp. 219-230, 1997.

- [27] [Care98] Carey M., Laura M., James K., and Berthold R. "Data Access Interoperability in the IBM Database Family". Bulletin of the Technical Committee on Data Engineering, Special Issue on Interoperability, Vol 21 No.3, September 1998.
- [28] [Cav04] Cavazos, F., and Jarquín, J. "A 3-tiered client-server distributed database system component-based", Proceedings of the winter international symposium on Information and communication technologies, ACM, Jan. 2004.
- [29] [Ceri83] Ceri, S., Stefano, Shamkant N., and Gio W. "Distribution Design of Logical Database Schemas". IEEE Transactions on Computers, SE-9(4), pp. 487-504, 1983.
- [30] [Ceri84] Ceri, S. and Pelgatti, G. "Distributed Databases-Principles and Systems". McGrawHill Inc., New York, San Francisco, Washington, D.C, 1984.
- [31] [Ceri91] Ceri, S., Houtsma, M., and Krller, A. "A classification of update methods for replicated databases. Tech. Rep.". CS-TR-91-1392. Computer Systems Laboratory, Stanford University, Stanford, CA. 1991.

- [32] [Cham81] Chamberlin, D., Astrahan, M., King, W., Lorie, R., Mehl, J., Price, T., Schkolnik, M., Selinger, P., Slutz, D., Wade, B., and Yost, R. "Support for repetitive transactions and ad hoc queries in system R". ACM Transaction on Database systems 6,1 (March), pp. 70-94, 1981.
- [33] [Chau96] Chaudhuri, S. and Gravano, L. "Optimizing queries over multimedia repositories". In Proceedings of the ACM SIGMOD Conference on Management of Data (Montreal, Canada, June), pp. 91-102, 1996.
- [34] [Chen92] Chen, S. AND PU, C. " A structural classification of integrated replica control mechanisms". Tech. Rep. CUCS-006-92. Columbia University, New York, NY., 1992.
- [35] [Cheun90] Cheung, S., Ahamad, M., and Ammar, M. "The grid protocol: A high performance scheme for maintaining replicated data". In Proceedings of the International Conference on Data Engineering (ICDE, Los Angeles, CA, Feb.)pp. 438-445, 1990.

- [36] [Chia03] Chia S.and Florence Y. "Implementation of enterprise resource planning in firms operating in the construction industry". *Architectural Science Review*, Vol. 46, pp.323-331, Sept. 2003.
- [37] [Chin01] Chin A. "Incremental Data Allocation and ReAllocation in Distributed Database Systems". *Journal of Database Management*, Jan-March v12 i1 pg. 35. 2001.
- [38] [Chu90] Chung, C. " DATAPLEX: An access to heterogeneous distributed databases Communication". ACM 33, 1 (Jan.), 70-80. (With corrigendum in Communication. ACM 33, 4 (Apr.), p. 459, 1990.
- [39] [Chundi96] Chundi, P., Rosenkrantz, D., and Ravi, S. "Deferred updates and data placement in distributed databases". In Proceedings of the 12th IEEE International Conference on Data Engineering (ICDE '97, New Orleans, LA, Feb.). IEEE Press, Piscataway, NJ, pp. 469-476, 1996.
- [40] [Cici90a] Ciciani, Bruno, Daniel M. Dias, and Philip S. "Analysis of Replication in Distributed Database Systems". *IEEE Transactions on Knowledge and Data Engineering*, 2(2), pp. 247-261, 1990.

- [41] [Cici90b] Ciciani B., Dias D., Iyer B. and Yu P., "A Hybrid Distributed Centralized System Structure for Transaction Processing". IEEE Transactions on Software Engineering 16/8, pp 791-806, 1990.
- [42] [Cici92] Ciciani B., Dias D. and Yu P., "Analysis of Concurrency-Coherency Control Protocols for Distributed Transaction Processing Systems with Regional Locality". IEEE Transactions on Software Engineering 18/10, pp. 889-914, 1992.
- [43] [Cole00] Cole R. "Decision Theoretic cost Model for Dynamic Plans", Bulletin of IEEE computer society technical committee on Data Engineering, Adaptive Query Processing, Vol.23 No.2, 2000.
- [44] [Corn90] Cornell, Douglas W. and Philip S. "Relation Assignment in Distributed Transaction Processing Environment". Proceedings of the Sixth International Conference on Data Engineering, pp.50-55, 1990.
- [45] [Crys03] Crystal report,  
<http://www.crystaldecisions.com/>, 2003

- [46] [Date00] Date C. "An Introduction to Database Systems". Seventh Edition, Addison-Wesley, 2000.
- [47] [Daud98] Daudpota, N. "Five Steps to Construct a Model of Data Allocation for Distributed Database System," Journal of Intelligent Information Systems, 11(2), pp. 153-168, 1998.
- [48] [Dewi93] Dewitt, D., Lieuwen, D., and Mehta, M. "Parallel pointer-based join techniques for object oriented databases". In Proceedings of the International IEEE Conference on Parallel and Distributed Information Systems .San Diego, CA, Jan. 1993.
- [49] [Du88] Du, X. and Fred J. "Data Allocation in a Dynamically Reconfigurable Environment". Proceedings of the Fourth International Conference on Data Engineering, pp. 74-81, 1988.
- [50] [Dun03] Dunne, E. divide-and-conquer, [www.csc.liv.ac.uk/~ped/teachadmin/algor/d\\_and\\_c.html](http://www.csc.liv.ac.uk/~ped/teachadmin/algor/d_and_c.html), 2003

- [51] [Eick95] Eickler, A., Gerlhof, C., and Kossmann, D. "A performance evaluation of OID mapping techniques". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Zurich, Switzerland, Sept.), pp.18-29, 1995.
- [52] [Elkh02] El\_Khatib, T., Williams, M., Marwick, H., and Mackinnon, M. "Using distributed approach to retrieve and integrate information from heterogeneous distributed databases". The Computer Journal; 45,4; API/INFORM Global, pg.381, 2002.
- [53] [Epst78] Epstein, R., Stonebraker, M., and Wong, E. "Query processing in a distributed relational database system". In Proceedings of the ACM SIGMOD Conference on Management of Data (Austin, TX, June), pp. 169-180, 1978.
- [54] [Esw74] Eswaran, K. "Placement of Records in a File and File Allocation in a Computer Network," Proceedings IFIPS Conference, pp. 304-307, 1974.

- [55] [Fagi96] Fagin, R. "Combining fuzzy information from multiple systems". In Proceedings of the ACM SIGMOD/SIGACT Conference on Principle of Database Systems (PODS) (Montreal, Canada, June), pp. 216-226, 1996.
- [56] [Fagi97] Fagin, R. and Wimmers, E. "Incorporating user preferences in multimedia queries" . In Proceedings of the International Conference on Database Theory (ICDT), Volume 1186 of Lecture Notes in Computer Science (LNCS) Springer-Verlag. ,pp. 247-261, Jan. 1997.
- [57] [Fan99] Fan, Y., Shi, W. and Wu, Ch., "Enterprise wide application integration platform for CIMS implementation". Journal of Intelligent Manufacturing; Dec.10,6; ABI/INFORM Global, pg.587, 1999.
- [58] [Fran96] Franklin, M., Jonsson, B., and Kossmann, D. "Performance tradeoffs for client-server query processing". In Proceedings of the ACM SIGMOD Conference on Management of Data (Montreal, Canada) , pp. 149-160, June 1996.

- [59] [Gang92] Ganguly, S., Hasan, W., and Rishnamurthy, R. "Query optimization for parallel execution". In Proceedings of the ACM SIGMOD Conference on Management of Data (San Diego, CA), pg. 918, June 1992.
- [60] [Gare79] Garey, M. and David S. "Compilers and Intractability: A Guide to the Theory of NP-Completeness". W. H. Freeman and Company. 1979.
- [61] [Gho91] Ghosh, D. and Ishwar M. "A Solution Procedure for the File Allocation Problem with File Availability and Response Time". Computers and Operations Research, 18(6), pp. 557-568, 1991.
- [62] [Gho92] Ghosh, D., Ishwar M., and Allen M. "File Allocation Problem: Comparison of Models with Worst Case and Average Communication Delays". Operations Research 40(6), pp. 1074-1085, 1992.
- [63] [Giff79] Gifford, D. "Weighted voting for replicated data". In Proceedings of the 7th Symposium on Operating Systems Principles (Asilomar, CA). pp. 150-162, Dec. 1979.

- [64] [Gold94] Goldring, R. "A discussion of relational database replication technology". InfoDB 8, 1, 1994.
- [65] [Gra97a] Gravano, L. and Garcia-Molina, H. "Merging ranks from heterogeneous internet sources". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Athens, Greece), pp.196-205, Aug. 1997.
- [66] [Gra97b] Gravano, L., Chang, C., Garcia-Molina, H., and Paepcke, A. "STARTS: Stanford proposal for internet meta-searching". In Proceedings of the ACM SIGMOD Conference on Management of Data (Tucson, AZ), pp.207-218, May 1997.
- [67] [Grae87] Graefe, G. and Dewrr, D. "The EXODUS optimizer generator". In Proceedings of the ACM SIGMOD Conference on Management of Data (San Francisco, CA), pp. 160-172, May 1987.
- [68] [Grae90] Graefe, G. "Encapsulation of parallelism in the volcano query processing system". In Proceedings of the ACM SIGMOD Conference on Management of Data (Atlantic City, NJ), pp.102-111, June 1990.

- [69] [Grae93] Graefe, G. "Query evaluation techniques for large databases". ACM Computing Surveys 25, 2, pp. 73-170, June 1993.
- [70] [Grae95] Graefe, G. "The cascades framework for query optimization". IEEE Data Engineering Bulletin 18, 3, pp. 19-29, Sept. 1995.
- [71] [Grae96] Graefe, G. "Iterators, schedulers, and distributed-memory parallelism". Software Practice and Experience 26, 4, pp. 427-452, April 1996.
- [72] [Gray92] Gray J. and Reuter A. "Transaction Processing: Concepts and Facilities". Morgan-Kaufmann, 1992
- [73] [Gray96] Gray J. "The Dangers of Replication and a Solution". In Proceedings of the ACM SIGMOD, International Conference on Management of Data, pp 173-182, 1996.
- [74] [Haas02] Haas, L., Lin, E., and Roth, M. "Data integration through database federation", IBM Systems Journal; 41, 4; ABI/INFORM Global. pg.578, 2002.

- [75] [Haas89] Haas, L., Freytag, J. C., Lohman, G., and Pirahesh, H. "Extensible query processing in starburst". In Proceedings of the ACM SIGMOD Conference on Management of Data, (Portland, OR, USA, May), pp. 377-388, 1989.
- [76] [Hal91] Halici, U. and Dogac, A., "An Optimistic Locking Technique For Concurrency Control in Distributed Databases", Transactions on Software Engineering 17/7, 1991.
- [77] [Hasselbring00] Hasselbring, W. "Information system integration". Association for Computing Machinery. Communications of the ACM; Jun; 43,6; ABI/INFORM Global, pg. 32, 2000.
- [78] [Herm79] Herman D. and Verjus J. "An Algorithm for maintaining the consistency of Multiple Copies". In Proceedings of the First Int. Conf. on Distributed Computing Systems, pp. 625-631, 1979.
- [79] [IBM03] IBM Corporation, Enterprise Information Portal,  
<Http://www.ibm.com/software/data/eip>, 2003

- [80] [Ioan91] Ioannidis, Y. and Kang, Y. "Left-Deep vs. Bushy Trees: An Analysis of Strategy Spaces and its Implications for Query Optimization". In Proceedings of the ACM-SIGMOD Conf. on Management of Data, Denver, CO, May. 1991.
- [81] [Ives99] Ives, Z., Florescu, D., Friedman, M., Levy, A., and Weld, D. "An adaptive query execution engine for data integration". In Proceedings of the ACM SIGMOD Conference on Management of Data (Philadelphia, PA, USA), pp.299-310, June 1999.
- [82] [Jeng88] Jenq B., Kohler W. H. and Towsley D., A. "Queuing Network Model for a Distributed Database Testbed System". IEEE Transactions on Software Engineering 14/7, Jul. 1988.
- [83] [Jeng90] Jenq, B., Woelk, D., Kim, W., and LEE, W. "Query processing in distributed ORION". In Proceedings of the International Conference on Extending Database Technology (EDBT) (Venice, Italy), pp. 169-187, March 1990.

- [84] [Jhin02] Jhingran, A., Mattos, N., and Pirahesh, H. "Information integration: A research agenda". IBM Systems Journal. Armonk. Vol. 41, Iss. 4; pg. 555, 2002.
- [85] [Kemm00] Kemme, B., Alonso, G. "A New Approach to Developing and Implementing Eager Database Replication Protocols". ACM Transactions on Database Systems, v25 i3, p333, 2000.
- [86] [Kos00a] Kossmann, D., Franklan, M., and Drach, G. "Cache Investment: Integrating query optimization and dynamic data placement". ACM Trans. Data System, 2000.
- [87] [Kos00b] Kossmann, D. "The State of the Art in Distributed Query Processing", ACM Computig Surveys; Dec; Vol. 32,4; ABI/INFORM Global, pp. 422-469, 2000.
- [88] [Kri87] Krishnamurthy, V., SW, S., Lam, H., MitchellL, M., and Barkmeyer, E. "A distributed database architecture for an integrated manufacturing facility". In Proceedings of the International Conference on Data and Knowledge Systems for Manufacturing and Engineering, Computer Society Press of the IEEE, pp.4-13, Oct. 1987.

- [89] [Kri91] Krishnamurthy, V., and Bernstein, A. "Bounded ignorance in replicated systems". In Proceedings of the Tenth ACM SIGACT-SIGMOD-SIGART Symposium on Principles of database systems (PODS '91, Denver, CO, May 29-31), D. J. Rosenkrantz, Chair. ACM Press, New York, NY, pp. 63-74, May 1991.
- [90] [Ladj98] Ladjel, Bellatreche, Kamalakar Karlapalem, and Qing L. "An Iterative Approach for Rules and Data Allocation in Distributed Deductive Database Systems". Proceedings of the ACM 7th International Conference on Information and Knowledge Management, pp. 356-363, 1998.
- [91] [Land82] Landers, T., and Rosenberg, R. "An overview of MULTIBASE". In Distributed Databases, H.J. Schneider. Ed. North Holland Publishing Company, The Fietheerland, pp. 153-184, 1982.
- [92] [Lani83] Laning, J. and Michael S. "File Allocation in a Distributed Computer Communication Network". IEEE Transactions on Software Engineering, Vol. C-32, No. 3, pp. 232-244, March 1983.

- [93] [Lanz93] Lanzelotte, R., Valduriez, P., and ZMT, M. "On the effectiveness of optimization search strategies for parallel execution spaces". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Dublin, Ireland), pp. 493-504, Aug.1993.
- [94] [Lee92] Lee, H., and Olivia R. "A Multiple Criteria Model for the Allocation of Data Files in a Distributed Information System". Computers and Operations Research, 19(1), pp. 21-33, 1992.
- [95] [Lev78] Levin, K., and Morgan, H. "A Dynamic Optimization Model for Distributed Databases," Operations Research, 26(5), pp. 824-835, 1978
- [96] [Lev82] Levin, K. "Adaptive Structuring of Distributed Databases". Proceedings of the National Computer Conference, pp. 691-696, 1982.
- [97] [Ley02] Leymann, F. and Roller, D. "Using Flows in Information Integration". IBM Systems Journal 41, No. 4, pp.732-742, 2002.

- [98] [Li87] Li, V. "Performance Models of Timestamp-Ordering Concurrency Control Algorithms in Distributed Databases". IEEE Transactions on Computers 36/9, Sep. 1987.
- [99] [Litw82] Litwin, W. et al. "SIRIUS System for Distributed Data Management," in *Distributed Databases*. H.J. Schneider (ed.), North-Holland, 1982.
- [100] [Lu85] Lu, H. and Cary, M. "Some experimental results on distributed join algorithms in a local network". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Stockholm, Sweden), pp. 229-304, 1985.
- [101] [Mack86] Mackert, L. and Lohman, G. "R\* optimizer validation and performance evaluation for distributed queries". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Kyoto, Japan), pp. 149-159, 1986.
- [102] [Maek85] Maekawa, M. "A [square root of N] algorithm for mutual exclusion in decentralized systems". ACM Trans. Comput. Syst. 3, 2, pp. 145-159, May 1985.

- [103] [Marip03] Mariposa, on going project at University of California at Berkeley web page.
- <http://mariposa.cs.berkeley.edu:8000/mariposa/>, 2003.
- [104] [Mier95] Mier, E. "One Database, Many Pieces", Communication Week, 07468121, 7/24/95, Issue 567, 1995.
- [105] [ODBC03] Open Database Connectivity (ODBC),  
<http://www.openlinksw.com/info/docs/odbcwhp/open.htm>, 2003
- [106] [Olso98] Olson, S., Oledereder, R., Shaw P., and Yach, D. "The Sybase Architecture for Extensible Data Management". Bulletin of the Technical Committee on Data Engineering, Special Issue on Interoperability, Vol. 21 No.3, Sep. 1998.
- [107] [Oracle97] ORACLE. "Oracle8(TM) Server Replication: Concepts Manual", 1997.
- [108] [Özsu99] Özsu, M. and Valduriez, P. "Principles of Distributed Database Systems". Prentice Hall, USA, 2nd edition, 1999.

- [109] [Paci99] Pacitti, E., Minet, P., and Simon, E. "Fast algorithms for maintaining replica consistency in lazy master replicated databases". In Proceedings of the International Conference on Very Large Data Bases (VLDB, Edinburgh, Scotland), pp. 126-137, Sept. 1999.
- [110] [Pir92] H. Pirahesh, J. Hellerstein, and W. Hasan, "Extensible Rule Based Query Rewrite Optimization in Starburst". Proceedings of the ACM SIGMOD International Conference on Management of Data, San Diego, CA, June 2-5, ACM, New York, pp. 39-48, June 1992
- [111] [Porc82] Porcar, H. "File Migration in Distributed Computing Systems". Ph.D. Thesis, University of California at Berkeley, 1982.
- [112] [Pu91] PU, C. and Lefe, A. "Replica control in distributed systems: An asynchronous approach". In Proceedings of the 1991 ACM SIGMOD International Conference on Management of Data (SIGMOD '91, Denver, CO, May 29-31), J. Clifford and R. King, Eds. ACM Press, New York, NY, pp. 377-386, May 1991.

- [113] [Rabi96] Rabinovich, M., Gehani, N., and Kononov, A. "Scalable update propagation in epidemic replicated databases". In Proceedings of the International Conference on Extending Data Base Technology (EDBT, Avignon, France). pp. 207-222, 1996.
- [114] [Ren96] Ren J., Takahashi Y. and Hasegawa T., "Analysis of Impact of Network Delay on Multiversion Conservative Timestamp Algorithms in DDBS". Performance Evaluation 26, pp 21-50, 1996.
- [115] [Riv90] Rivera-Vega, Pedro, I., Ravi, V., and Shamkant, B. "Scheduling Data Redistribution in Distributed Databases". Proceedings of the Symposium on Reliability in Distributed Software and Database Systems, pp. 166-173, 1990.
- [116] [Ros03] Rosen, K. Discrete Mathematics and Its Applications 4/E,  
<http://people.cs.vt.edu/~irchen/4004/pdf/discreteMath/chapt53.pdf>, 2003.

- [117] [Rosc98] Roscheisen, M., Baldonado, M., Chang, C., Gravano, L., Ketchpel, S. and Paepcke, A. "The Stanford InfoBus and Its Service Layers: Augmenting the Internet with Higher-Level Information Management Protocols". Digital Libraries in Computer Science: The MeDoc Approach, Lecture Notes in Computer Science, No. 1392, Springer, New York, pp. 213-230, 1998.
- [118] [Roth02] Roth, M., Wolfson, D., Kleewein, J., and Nelin, C. "Information integration: A new generation of information technology". IBM System Journal; 41, 4; ABI/INFORM Global, pg.563, 2002.
- [119] [Schn90] Schneider, D. and Dewrr, D. "Tradeoffs in processing complex join queries via hashing in multiprocessor database machines". In Proceedings of the Conference on Very Large Data Bases (VLDB) (Brisbane, Australia, Aug.), pp. 469-480, 1990.
- [120] [Sega76] Segall, A. "Dynamic File Assignment in a Computer Network". IEEE Trans. Automat. Control, AC-21, pp. 161-173, April 1976.

- [121] [Sel79] Selinger, P., Astrahan, M., Chamberlin, D., Lorie, R., and Price, T. "Access Path Selection in a Relational Database Management System". Proceedings of the '79 ACM SIGMOD International Conference on Management of Data, Boston, MA, ACM, New York, pp. 23-34, 1979.
- [122] [Shei97] Sheikh, F. and Woodside, M. "Analytic Performance Modelling of a Distributed Database System". Proceedings of the 17th International Conference on Distributed Computing Systems, 1997.
- [123] [Shek90] Shekita, E. AND Carey, M. "A performance evaluation of pointer-based joins". In Proceedings of the ACM SIGMOD Conference on Management of Data (Atlantic City, NJ), pp. 300-311, May 1990.
- [124] [Sheth90] Sheth, A., AND Larson, J. "Federated databases: Architectures and integration". ACM Comput. Suru. pp. 4-22, Dec. 1990.

- [125] [Side97] Sidell, J., Aoki, P., Sah, A., Staelin, C., Stonebraker, M., and Yu, A. "Data replication in Mariposa". In Proceedings of the 12th IEEE International Conference on Data Engineering (ICDE '97, New Orleans, LA). IEEE Press, Piscataway, NJ, pp. 485-494, Feb. 1996.
- [126] [Sin91a] Singhal, M. "Performance Analysis of the Basic Timestamp Ordering Algorithm via Markov Modeling". Performance Evaluation 12, 1991a
- [127] [Sin91b] Singhal, M. "Analysis of the Probability of Transaction Abort and Throughput of Two Timestamp Ordering Algorithms for Database Systems". IEEE Transactions on Knowledge and Data Engineering 3/2, Jun. 1991b.
- [128] [So98] So, S., Ishfaq A., and Kamalakar K. "Data Allocation Algorithm for Distributed Hypermedia Documents". The IEEE 17th Symposium on Reliable Distributed Systems, pp. 473-478, 1998.
- [129] [Soma02] Somani, A., Choy, D. and Kleewein, J. "Bringing together content and data management systems: Challenges and opportunities", IBM Systems Journal; 41,4; ABI/INFORM Global, pg 686, 2002.

- [130] [Srin02] Srinivasa, R. "Network-Aided Concurrency Control in Distributed Databases". Ph.D. thesis, University of Virginia, 2002.
- [131] [Stace94] Stacey, D. " Replication: DB2, Oracle, or Sybase". Database Program. Des. 7-12, 1994.
- [132] [Ston79] Stonebraker, M. "Concurrency Control and Consistency of Multiple Copies of Data in Distributed INGRES". IEEE Trans. Software Eng. SE-5(3), pp.188-194, May 1979.
- [133] [Ston86] Stonebraker, M. "The Design and Implementation of Distributed INGRES," in The INGRES Papers, Addison-Wesley, Reading, MA., 1986.
- [134] [Ston94] Stonebraker, M. "Readings in database Systems". Second ed., Morgan Kaufmann Publishers, San Mateo, CA., 1994.
- [135] [Ston96] Stonebraker, M., Aoki, M., Pfaffen, W., Sah, A., Sidell, J., Staelin, C. and Yu, A. "Mariposa: A wide-area distributed database system" The VLDB Journal, Springer-Verlag, 5: pp.48-63, 1996.

- [136] [Tamh98] Tamhankar, A. and Sudha R. "Database Fragmentation and Allocation: An Integrated Methodology and Case Study," *IEEE Transactions on Systems, Man, and Cybernetics*, 28(3), pp. 288-305, 1998.
- [137] [Tan92] Tanenbaum, A. "Modern operating systems". UK, Prentice Hall. 1992.
- [138] [Tan96] Tanenbaum, A. "Computer Network". 3rd edition. USA, Prentice Hall Inc., 1992.
- [139] [Tand87] The Tandem Database Group. "NonStop SQL-A distributed High-performance, High-availability implementation of SQL". In Proc. Workshop on High Performance Transaction system, pp. 66-104, Sep.1987.
- [140] [Tand88] The Tandem Performance Group. "A Benchmark of NonStop SQL on the Debit Credit Transaction". In proc. ACM SIGMOD Int. Conf. on Management of Data, pp. 337-341, June 1988.
- [141] [Temp87] Templeton, M., WARD, P., and LUND, E. "Pragmatics of access control in Merand". Q. Bull. IEEE Comput. SOC. Tech. Committee Data Eng. 10, 3, pp. 33-38, Sept. 1987.

- [142] [Thee96] Theel, E. and Henning. P. "Bounded Dynamic Data Allocation in Distributed Systems". The 1996 3rd International Conference on High Performance Computing, pp. 126-131, 1996.
- [143] [Thoma90] Thomas, G. Thompson, G., Chung, C., Barkmerer, E., Carter, F., Templeton, M., Fox, S., and Hartman, B."Heterogeneous Distributed Database systems for Production use". ACM computer Surveys, Vol. 22, No. 3, pp.237-266 Sept, 1990.
- [144] [Tu87] Tu, J., and Hopp, T. "Part geometry data in the AMRF". NBSIR 87-3551, National Bureau of Standards, Gaithersburg, Md. 87, 1987.
- [145] [Tuck95] Tucker A. "Applied Combinatory". 3rd ed. John Wiley & Sons, Inc., New York, U.S.A. 1995.
- [146] [Urha98] Urhan, T., Franklin, M., and Amsaleg, L. "Cost based query scrambling for initial delays". In Proceedings of the ACM SIGMOD Conference on Management of Data (Seattle, WA), pp.130-141, June 1998.
- [147] [Urha99] Urhan, T., and Franklin, M. "Xjoin: Getting Fast Answers from Slow and Bursty Networks". Technical report CS-TR-3994, University of Maryland, College Park, Feb. 1999.

- [148] [Vald84] Valduriez, P. and Gardarin, G. "Join and semijoin algorithms for a multiprocessor database machine". ACM Transactions on Database Systems 9, 1, pp. 133-161, March 1984.
- [149] [Wan98] Wang J., Li J. and Kameda H. "Distributed Concurrency Control with Local Wait-Depth Policy". IEICE Transactions on Information and Systems E81-D/6, pp 513-520, Jun. 1998.
- [150] [Weip03] Weippl, E., Klug, L., and Essmayr, W. "A new approach to secure federated information bases using agent technology". Journal Of Database Management; Jan-Mar '03; 14,1; ABI/INFORM Global. Pg. 48, 2003.
- [151] [Will81] Williams, R., Daniels, D., Haas, L., Lapis, G., Lindsay, B., Ng, P., Obermarck, R., Selinger, P., Walker, A., Wilms, p., and Yost, R. "R\* An Overview of the Architecture". IBM research, San Jose, CA, RJ3325. Reprinted in: M Stonebraker (ed), Readings in Database systems, Morgan Kaugmann Publishers, pp.515-536, 1981.

- [152] [Wils91] Wilshut, A., and APER, A. "Dataflow query execution in a parallel main memory". In Proceedings of the International IEEE Conference on Parallel and Distributed Information Systems (Miami, FL), pp. 68-77, Dec. 1991.
- [153] [Wine98] Winemiller, E., Roff, J., Heyman, B., and Groom, R. "Visual Basic6 Database How-To", Sams Publishing, US., 1998.
- [154] [Wolf97] Wolfson, O. , Sushil J. and Yixiu H. "An Adaptive Data Replication Algorithm". ACM Transactions on Database Systems, 22(2), pp. 255-314, 1997.