

Home: +1.512.346.5240

Office: +1.512.788.5254

[sauer@technologists.com](mailto:sauer@technologists.com)

7123 Valburn Drive

Austin, Texas 78731

<http://technologists.com/~sauer>

## BOOKS

Duran and Sauer, *Mainstream Videoconferencing: A Developer's Guide to Distance Multimedia*, Addison-Wesley (1997). See <http://technologists.com/jwdchs/>.

MacNair and Sauer, *Elements of Practical Performance Modeling*, Prentice-Hall (1985).

Sauer and MacNair, *Simulation of Computer Communication Systems*, Prentice-Hall (1983).

Sauer and Chandy, *Computer Systems Performance Modeling*, Prentice-Hall (1981).

## BOOK CHAPTERS:

C.H. Sauer, "[Client/Server Concepts and Technology](#)," D.D. Cerutti, editor, *Distributed Computing Environments*, McGraw-Hill, 1993.

T. G. Lang, M. S. Greenberg and C.H. Sauer, "[The Virtual Resource Manager](#)," *IBM RT Personal Computer Technology*, IBM SA23-1057 (1986).

S. S. Lavenberg and C. H. Sauer, "Analytical Results for Queueing Models," Chapter 3 of S. S. Lavenberg, editor, *Computer Performance Modeling Handbook*, Academic Press, Inc., New York (1983).

S. S. Lavenberg and C. H. Sauer, "Approximate Analysis Techniques for Queueing Networks," Chapter 4 of S. S. Lavenberg, editor, *Computer Performance Modeling Handbook*, Academic Press, Inc., New York (1983).

C. H. Sauer and E.A. MacNair, "Extended Queueing Network Models," Chapter 8 of S. S. Lavenberg, editor, *Computer Performance Modeling Handbook*, Academic Press, Inc., New York (1983).

M. Reiser and C.H. Sauer, "Queueing Network Models: Methods of Solution and their Program Implementation," *Current Trends in Programming Methodology, Volume III: Software Modeling and Its Impact on Performance*, (K.M. Chandy and R.T. Yeh, editors), Prentice Hall, 1978.

## JOURNAL PAPERS:

L.K. Loucks and C.H. Sauer, "[Advanced Interactive Executive \(AIX\) Operating System Overview](#)," *IBM Systems Journal* 26, 4 (1987) pp. 326-345.

S. Tucci and C.H. Sauer, "[The Tree MVA Algorithm](#)", IBM Research Report RC-9338 (April 1982). *Performance Evaluation* 5, 3 (August 1985).

- W.-M. Chow, E.A. MacNair and C.H. Sauer, "[Analysis of Manufacturing Systems by the Research Queueing Package](#)," IBM Research Report RC-10769 (October 1984). *IBM J. of Research and Development* 29, 4 (July 1985).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "[Queueing Network Simulations of Computer Communication](#)", IBM Research Report RC-9727 (December 1982). *IEEE Transactions on Communications COM-32*, 1 (January 1984).
- C.H. Sauer, "[Computational Algorithms for State-Dependent Queueing Networks](#)", IBM Research Report RC-8698 (February 1981). *Transactions on Computing Systems* 1, 1 (February 1983) pp. 67-92.
- C.H. Sauer, "[Approximate Solution of Queueing Networks with Simultaneous Resource Possession](#)", *IBM J. of Research and Development* 25, 6 (November 1981).
- Y. Bard and C.H. Sauer, "[IBM Contributions to Computer Performance Modeling](#)", *IBM J. of Research and Development* 25, 5 (September 1981), pp. 562-570. (Invited paper.)
- C.H. Sauer, E.A. MacNair and S. Salza, "[A Language for Extended Queueing Networks](#)", *IBM J. of Research and Development* 24, 6 (November 1980).
- K.M. Chandy and C.H. Sauer, "[Computational Algorithms for Product Form Queueing Networks](#)", *CACM* 23, 10 (October 1980).
- C.H. Sauer and K.M. Chandy, "[Approximate Solution of Queueing Models of Computer Systems](#)", *Computer* 13, 4, April 1980. (Invited paper.)
- C.H. Sauer and E.A. MacNair, "[Queueing Network Software for Systems Modeling](#)," *Software-Practice and Experience* 9, 5, May 1979.
- C.H. Sauer and K.M. Chandy, "[The Impact of Distributions and Disciplines on Multiple Processor Systems](#)", *Communications of the ACM* 22, 1, January 1979.
- S.S. Lavenberg, T.L. Moeller and C.H. Sauer, "[Concomitant Control Variables Applied to the Regenerative Simulation of Queuing Systems](#)," *Operations Research* 27, 1, January-February 1979.
- K.M. Chandy and C.H. Sauer, "[Approximate Methods for Analysis of Queueing Network Models of Computer Systems](#)", *Computing Surveys* 10, 3, September 1978. (Invited paper.)
- S.S. Lavenberg and C.H. Sauer, "[Sequential Stopping Rules for the Regenerative Method of Simulation](#)", *IBM J. of Research and Development* 21, 6, November 1977.
- K.M. Chandy, J. Hogarth and C.H. Sauer, "[Selecting Capacities in Queueing Network Models of Computer/Communication Systems](#)," *IEEE Transactions on Software Engineering* 3, 4, July 1977.
- C.H. Sauer and K.M. Chandy, "[Approximate Analysis of Central Server Models](#)", *IBM J. of Research and Development* 19, 3 May 1975.

#### ARTICLES (not refereed):

- C.H. Sauer, "[Meaningful Indicators of System Performance](#)," *Unix Technology Advisor* 2, 7 (July 1990).
- C.H. Sauer, "[Unix - The Force Behind Personal Computing?](#)" *Unix Technology Advisor* 2, 2 (February 1990).
- C.H. Sauer, "[Technology Infusion and Integration in AIX](#)," *Unix Technology Advisor* 1, 2 (April 1989).
- L.K. Loucks and C.H. Sauer, "[Saving the Day](#)", *Unix Review* 7, 1 (January 1989).

- C.H. Sauer, K.A. Bohrer, T.G. Lang, C.S. Minshall, G.L. Owens, K. Solem, B.J. Walker, "[Convergence of AIX and 4.3BSD](#)", *UniForum Conference Proceedings*, San Francisco, February 1989.
- C.H. Sauer, "Distributed File System Issues in Unix Operating Systems," *UniForum-DC*, Washington, August 1988.
- C.H. Sauer, "[Presenting a Single System Image with Fine Granularity Mounts](#)", ;*login*: 13, 4 (July/August 1988).
- C.H. Sauer, D.W. Johnson, L.K. Loucks, A.A. Shaheen-Gouda, T.A. Smith, "[Statelessness and Statefulness in Distributed Services](#)", *UniForum 1988*, Dallas, Texas, February 1988.
- C.H. Sauer, D.W. Johnson, L.K. Loucks, A.A. Shaheen-Gouda, T.A. Smith, "[RT PC Distributed Services: File System](#)," ;*login*: 12, 5 (September/October 1987) pp. 12-22.
- C.H. Sauer, D.W. Johnson, L.K. Loucks, A.A. Shaheen-Gouda and T.A. Smith, "[RT PC Distributed Services Overview](#)", *Operating Systems Review* 21, 3 (July 1987) pp. 18-29.
- C.H. Sauer, "[Numerical Solution of Some Multiple Chain Queueing Networks](#)", IBM Research Report [RC-8986](#) (August 1981). *Performance Evaluation Review* 10, 4 Winter 1981-1982, pp. 47-56.
- C.H. Sauer and E.A. MacNair, "[Simultaneous Resource Possession in Queueing Models of Computers](#)", IBM Research Report RC-6971, January 1978. *Performance Evaluation Review* 7, 1 and 2, Spring and Summer 1978.
- C.H. Sauer, "[Confidence Intervals for Queueing Simulations of Computer Systems](#)," IBM Research Report RC-6669, Yorktown Heights, New York, August 1977. *Performance Evaluation Review* 8, 1 and 2, Spring and Summer 1979.

### CONFERENCE PAPERS:

- J.M. Sammons and C.H. Sauer, "[Measuring the Performance of Personal Computers](#)", Comcon Spring '92, Thirty-Seventh IEEE Computer Society International Conference, San Francisco, February 1992.
- J.C. O'Quin and C.H. Sauer, "[AIX 3 Technology](#)", *Workstation Operating Systems: Proceedings of the Second Workshop on Workstation Operating Systems*, IEEE, Pacific Grove, California, September 1989.
- C.H. Sauer and E.A. MacNair, "[The Evolution of the Research Queueing Package](#)", IBM Research Report RC-10376 (February 1984). *Proceedings of the International Conference on Modelling Techniques and Tools for Performance Analysis*, North-Holland, Paris, May 1984. (Invited Paper)
- E.A. MacNair and C.H. Sauer, "The Research Queueing Package: A Primer," IBM Research Report RC-9784 (1983). *SHARE 60 Proceedings*.
- A. Blum, E.A. MacNair and C.H. Sauer, "The Research Queueing Package: Graphics Developments," IBM Research Report RC-9513 (August 1982). *Proceedings GI/NTG 83: Measurement, Modelling and Evaluation of Computer Systems*, University of Stuttgart (February 1983).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "[The Research Queueing Package: Past, Present and Future](#)," *Proceedings 1982 National Computer Conference*. Reprinted in K.S. Trivedi, editor, *Effectiveness of Fault-Tolerant Multiple Processor Systems*, IEEE Computer Society, 1984.

- C.H. Sauer, "Passive Queue Models of Computer Networks," *Computer Networking Symposium*, Gaithersburg, Maryland, December 1978.
- C.H. Sauer, "Queueing Network Models in the Design of Computer Communication Networks," *International Conference on Communications*, Toronto, June 1978. (Invited paper.)
- C.H. Sauer, M. Reiser and E.A. MacNair, "RESQ - A Package for Solution of Generalized Queueing Networks," *Proceedings 1977 National Computer Conference*.
- C.H. Sauer, "Simulation of Generalized Queueing Networks," *Proceedings 1975 Summer Computer Simulation Conference*, San Francisco, July 1975.
- K.M. Chandy, C.H. Sauer and J.C. Browne, "An Overview of Modeling Techniques for Parallel Processing Systems," *Digest of Papers, CompCon75*, San Francisco, February 1975. (Invited paper.)
- D.V. Foster, P.F. McGehearty, C.H. Sauer and C.N. Waggoner, "[A Language for Analysis of Queueing Models](#)", *Proceedings Fifth Annual Pittsburgh Modeling and Simulation Conference*, University of Pittsburgh, April 1974.

### **PUBLISHED REPORTS:**

- C.H. Sauer, "[Disk Subsystems: The Dell Drive Array](#)," January 1990.
- E.A. MacNair and C.H. Sauer, "The Research Queueing Package: USER Function Data Structures," (IBM Confidential) IBM Research Report RC-11132 (April 1985).
- E.A. MacNair and C.H. Sauer, "The Research Queueing Package: Evaluation Data Structures," (IBM Confidential) IBM Research Report RC-11131 (April 1985).
- E.A. MacNair and C.H. Sauer, "The Research Queueing Package: Parametric Solutions and Graphics," IBM Research Report RC-10585 (June 1984).
- C.H. Sauer and E.A. MacNair, "The Research Queueing Package: Availability Notice," IBM Research Report [RA-144](#) (August 1982).
- A.M. Blum, E. Jaffe, E.A. MacNair, J.F. Kurose and C.H. Sauer, "The Research Queueing Package: An Introduction and Update," IBM Research Report RC-10016 (June 1983).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "The Research Queueing Package Version 2: TSO Users Guide," IBM Research Report RA-140, Yorktown Heights, New York (April 1982).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "The Research Queueing Package Version 2: CMS Users Guide," IBM Research Report [RA-139](#), Yorktown Heights, New York (April 1982).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "The Research Queueing Package Version 2: Introduction and Examples," IBM Research Report [RA-138](#), Yorktown Heights, New York (April 1982).
- C.H. Sauer, E.A. MacNair and J.F. Kurose, "Computer/Communication System Modeling with the Research Queueing Package Version 2," IBM Research Report RA-128 (IBM Internal Use Only, November 1981).
- C.E. Mear and C.H. Sauer, "A Simple and Robust Data Structure for the Simulation Event Set," IBM Research Report [RC-8001](#), December 1979.
- C.H. Sauer, "The Research Queueing Package Version 2: The Template Facility and Accompanying Extensions," IBM Research Report RC-7674 (IBM Internal Use Only), May 1979.
- C.H. Sauer, "Some Results on Queue Lengths in Queueing Networks Solved by Aggregation," IBM Research Report RC-7607, April 1979.
- E.A. MacNair and C.H. Sauer, "Multiple Language (APL and PL/I) Interfaces for Queueing Network Software," IBM Research Report RC-7535, March 1979.
- C.H. Sauer, "Structure and Internal Operation of the Simulation Package APLOMB," IBM Research Report RC-7298 (IBM Confidential), September 1978.
- E.A. MacNair and C.H. Sauer, "RESQ: Dialogue Files," IBM Research Report RC-7117 (IBM Internal Use Only), Yorktown Heights, New York, May 1978.
- E.A. MacNair, M. Reiser and C.H. Sauer, "RESQ: Subroutine Interface," IBM Research Report RC-7093 (IBM Internal Use Only), Yorktown Heights, New York, April 1978.
- C.H. Sauer, M. Reiser and E.A. MacNair, "RESQ: Elements, Examples and Dialogues," IBM Research Report RC-6721 (IBM Internal Use Only), Yorktown Heights, New York, August 1977.
- C.H. Sauer and E.A. MacNair, "Computer/Communication System Modeling with Extended Queueing Networks," IBM Research Report RC-6654, Yorktown Heights, New York, August 1977.
- C.H. Sauer and E.A. MacNair, "Application of RESQ: Communication System Evaluation," IBM Research Report RC-

6633, Yorktown Heights, New York, July 1977.

C.H. Sauer, L. Woo and W. Chang, "Hybrid Analysis/Simulation: Distributed Networks," IBM Research Report [RC-6341](#), Yorktown Heights, New York, June 1976.

C.H. Sauer, "Characterization and Simulation of Generalized Queueing Networks," IBM Research Report RC-6057, Yorktown Heights, New York, May 1976.

C.H. Sauer and K.M. Chandy, "Parametric Modeling of Multi-miniprocessor Systems," IBM Research Report RC-5978, Yorktown Heights, New York, May 1976.