

BIOGRAPHICAL SKETCH

SUDHIR AGGARWAL

CONTACT

Department of Computer Science, Florida State University, Tallahassee, FL 32306-4530

PROFESSIONAL PREPARATION

Stanford University	Mathematics	B.S. 1969
University of Michigan	Mathematics	M.S. 1971
University of Michigan	Computer & Comm. Sciences	M.S. 1972
University of Michigan	Computer & Comm. Sciences	Ph.D. 1975

APPOINTMENTS

Aug. 2005 – present Professor, Dept of Computer Science, Florida State University
Aug. 2002 – Aug. 2005 Professor & Chair, Dept of Computer Science, Florida State University
June 1999 – Aug. 2002 Director, CTO & MTS, Bell Laboratories / Lucent Technologies
Aug. 1990 – June 1999 Professor & Chair, Dept. of Computer Science, SUNY Binghamton
June 1993 – June 1998 Director, Center for Computing Technologies, SUNY Binghamton
June 1989 – Apr. 1990 VP for Software, Information Machines (startup)
June 1987 – June 1989 District Manager, Dist. Sys. Soft. Res., Bell Communications Research
Mar. 1982 – June 1987 MTS, Mathematical Sciences Research, AT&T Bell Laboratories
Sep. 1977 – Mar. 1982 Assist. & Assoc. Prof., Dept. of Math., Univ. of California, Riverside
June 1976 – Sep. 1977 Research Scientist, Eng. Res. Div., Lawrence Livermore National Lab
Sep. 1975 – June 1976 Visiting Assist. Prof., Dept. of Computer Science, University of Oregon

SELECTED PUBLICATIONS

1. Sudhir Aggarwal, Daniel Beech, Rajarshi Das, Breno de Medeiros, Eric Thompson, “X-Online: An Online Interface for Digital Decryption Tools,” *Proceedings of the 2nd Int. Workshop on Systematic Approaches to Digital Forensics Engineering (SADFE 2007)*, April 2007, pp. 105-116
2. Sudhir Aggarwal, Bob Breeden, Peter Henry, and Judie Mulholland, “A Training Tool for Internet Crimes against Children Cases,” in *IFIP Vol. 222, Advances in Digital Forensics II*, eds. Olivier & Sheno, Springer, 2006, pp. 317-330.
3. Sudhir Aggarwal, Justin Christofoli, Sarit Mukherjee and Sampath Rangarajan, “Authority Assignment in Distributed Multi-Player Proxy-based Games,” *Proceedings of the 5th Workshop on Network & System Support for Games 2006*, October, 2006.
4. Sudhir Aggarwal, Michael Burmester, Peter Henry, Leo Kermes, Judie Muholland, “Anti-Cyberstalking: The Predator and Prey Alert (PAPA) System,” *Proceedings of the 1st Int. Workshop on Systematic Approaches to Digital Forensics Engineering (SADFE 2005)*, November 2005, pp. 195-205.
5. Sudhir Aggarwal, Peter Henry, Leo Kermes, Judie Muholland, “Evidence Handling in Proactive Cyberstalking Investigations: the PAPA Approach,” *Proceedings of the 1st Int. Workshop on Systematic Approaches to Digital Forensics Engineering (SADFE 2005)*, November 2005, pp. 165-176.
6. Sudhir Aggarwal, Hemant Banavar, Sarit Mukherjee and Sampath Rangarajan, “Fairness in Dead-Reckoning Based Distributed Multi-Player Games,” *ACM SIGCOMM 2005 Workshop on NetGames*, October 2005, (on-line proceedings).

7. Sudhir Aggarwal, Madhura Limaye, Arun Netravali, and Krishan Sabnani, "Constrained Diameter Steiner Trees for Multicast Conferences in Overlay Networks," *Proceedings of the 1st Int. Conf. on Quality of Service in Heterogeneous Wired/Wireless Networks, (QShine 2004)*, October 2004, pp. 262-271.
8. Sudhir Aggarwal, Hemant Banavar, Amit Khandelwal, Sarit Mukherjee and Sampath Rangarajan, "Accuracy in Dead-Reckoning Based Distributed Multi-Player Games," *ACM SIGCOMM 2004 Workshop on NetGames*, August 2004, pp. 161-165.
9. Sandeep Mitra and Sudhir Aggarwal, "Infrastructure for the Synchronization and Coordination of Concurrent Java Component Programs," *Proceedings of the 33rd Hawaii International Conference on System Sciences (HICSS 33)*, January 2000, cd-rom.
10. S. Aggarwal, S. Paul, D. Massey and D. Calderaru, "A Flexible Multicast Routing Protocol for Group Communication," *Computer Networks, Volume 32, Issue 1*, January 2000, pp. 35-60
11. K. Ghose, S. Aggarwal, A. Ghosh, D. Goldman, P. Sulatycke, P. Vasek, and D. Vogel "Designing Multiprocessor/Distributed Real-Time Systems Using the ASSERTS Toolkit," *Euro-Par Conference (in Lecture Notes in Computer Science, Vol.1685)*, August 1999, pp. 505-510.
12. Sudhir Aggarwal, Abhrajit Ghosh and Sandeep Mitra, "A Middleware Architecture for Coordination in CORBA Based Distributed Applications," *Proceedings of the 9th IFIP/IEEE Int. Workshop on Distributed Systems: Operations and Management (DSOM98)*, Oct. 1998, pp. 91-104.
13. Sudhir Aggarwal, Fuyung Hung and Weiyi Meng, "WIRE - A WWW-based Information Retrieval and Extraction System," *Proceedings of the 9th Int. Workshop. on Database and Expert Systems Applications (DEXA98)*, August 1998, pp. 887-892.
14. K. Ghose, S. Aggarwal, P. Vasek, S. Chandra, A. Raghav, A. Ghosh, and D. Vogel, "ASSERTS: A Toolkit for Real-time Software Design, Development and Evaluation," *9th EuroMicro Workshop on Real-Time Systems*, June 1997, pp. 224-232.
15. Barry Kelly and Sudhir Aggarwal, "A Framework for a Fidelity Based Agent Architecture for Distributed Interactive Simulation," *Proceedings of the 14th Workshop on Standards for Distributed Interactive Simulation*, March 1996, pp. 541-546.
16. Sudhir Aggarwal and Amritansh Raghav, "Dualcast: A Scheme for Reliable Multicasting," *Proceeding of the 1994 Int. Conf. on Network Protocols*, Oct. 1994, pp. 15-22.
17. Sudhir Aggarwal and Chakib Chraibi "On the Scheduling of Hyperperiodic Tasks," *Proceedings of the 5th EuroMicro Workshop on Real-Time Systems*, June 1993, pp. 112-117.
18. Sudhir Aggarwal and Patricia Obenour, "Specifying a Switching System using IC*" *Proceedings of IEEE INFOCOM '90*, August 1990.
19. S. Aggarwal, C. Courcoubetis and P. Wolper, "Adding Liveness Properties to Coupled Finite State Machines," *ACM Trans. on Programming Languages and Systems, Vol. 12-2*, April 1990, pp. 303-339.
20. S. Aggarwal, D. Barbara, W. Cunto, and M.R. Garey, "The Complexity of Collapsing Reachability Graphs," in *Lecture Notes in Computer Science, J. Sifakis (ed), Proceedings of the Workshop on Automatic Verification Methods for Finite State Systems*, Grenoble, France, 1989, pp. 269-274.
21. Sudhir Aggarwal and Zvi Har'El, "Simulation Analysis of Protocols in an Integrated Software Environment," *Computer Networks & ISDN Systems, Vol. 16-3*, January 1989, pp. 197-215.
22. S. Aggarwal, D. Barbara and K.Z. Meth, "A Software Environment for the Specification and Analysis of Problems of Coordination and Concurrency," *IEEE Trans. on Software Engineering, Vol. 14-3*, March, 1988, pp. 280-290.

23. S. Aggarwal, D. Barbara and K.Z. Meth, "SPANNER: A Tool for the Specification, Analysis, and Evaluation of Protocols," *IEEE Trans. on Software Engineering, Vol. 13-12*, December, 1987, pp. 1218-1237.
24. S. Aggarwal, D. Barbara and C. Courcoubetis, "Real-time Coordination of Concurrent Activities," in *Protocol Specification, Testing and Verification VI*, eds. G. Bochmann and B. Sarikaya, North-Holland, 1986.
25. Sudhir Aggarwal and Krishan Sabnani, "Formal Specification of a File Transfer Protocol," *Proceedings of IEEE INFOCOM '86*, pp. 47-57, April 1986.
26. S. Aggarwal, K. Sabnani and B. Gopinath, "A New File Transfer Protocol," *AT&T Technical Journal 64 (10)*, pp. 2387-2411, December 1985.
27. J.K. Oddson and S. Aggarwal, "Discrete Event Simulation of Agricultural Pest Management Systems," *Simulation 44 (10)*, pp. 285-293, June, 1985.
28. Sudhir Aggarwal and Robert P. Kurshan, "Modeling Elapsed Time in Protocol Specification," in *Protocol Specification, Testing and Verification III*, ed. H. Rudin and C.H. West, North-Holland, 1983.
29. Sudhir Aggarwal, "A Note on 'Indecomposable Parallel Maps' by S. Amoroso and I.J. Epstein," *Journal of Computer and System Science 17-2*, October, 1978.
30. Sudhir Aggarwal, "Simplification Via Aggregation for Neural Networks," *Simulation 31-4*, October, 1978.
31. Sudhir Aggarwal, "Deterministic Representation of Probabilistic Systems by Ergodic Machines," *Mathematical Systems Theory 10-4*, 1977.

SYNERGISTIC ACTIVITIES

- Directing the Electronic Crime Investigative Technologies (ECIT) Laboratory (2007 – present), a research group working with the Florida Department of Law Enforcement and the National White Collar Crime Center, focusing on research in digital forensics and electronic crime.
- Co-director of the Florida Cybersecurity Institute (2002 – 2005), a cooperative entity set up between Florida State University, the Florida Department of Law Enforcement, and the National White Collar Crime Center, to cooperate on research, training, and education in the areas of cybersecurity and cybercrime.
- Member, National White Collar Crime Center's Cybercrime Advisory Board (2004 – present).
- Co-organized and hosted the "Homeland Security Workshop on Information Analysis, Synthesis, and Cybersecurity" Tallahassee, Florida (2003).
- As chief technology officer (2000 –2002) of the internet content delivery and distribution business unit of Lucent Technologies, I was responsible for the architecture, portfolio, and design and development of the Imminet™ product line including intelligent 4/7 switches and caches (static, streaming, secure).
- Participant in the NSF-sponsored workshop (by invitation only) "Modeling and Simulation of Ultra-Large Networks: Challenges and New Research Directions" (November 2001).
- General Co-chair of the *1998 International Conference on Network Protocols*, (1998).
- An editor for *Computer Networks* (1986 - 1999).
- An editor for *IEEE Transactions on Communications* (1990 - 1993).
- General and Program Co-chair for the *IFIP Eighth International Symposium on Protocol Specification, Testing and Verification*, (1988).
- At Bell Laboratories, designed and developed software tools for the specification and analysis of protocols. A prototype system (SPANNER) was used for research and led to the development of a commercial system.