

# CURRICULUM VITA

## *Israel Cidon*

Date: February 2004  
Year and Place of Birth: 1954, Israel  
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## **Academic Degrees**

1984 - D.Sc. Degree in Electrical Engineering - Technion.  
1980 - B.Sc. Degree in Electrical Engineering (Summa Cum Laude) - Technion.

## **Appointments**

2002-now Head of Jacobs Center of Information and Communication Technologies - Technion  
1998-now Professor - Elect. Eng., Technion  
1988-now CTO for Viola Networks  
2000-2001 Sabbatical – with Viola Networks and Actona Technologies  
2000-now Chief Scientist – Actona Technologies  
1996-2000 Visiting Scientist - Sun Microsystems Labs, CA  
1992-1997 Associate Professor - Elect. Eng., Technion  
1994-1995 Manager, High-Speed Networking - Sun Microsystems Labs, CA  
1993-1994 Research Staff Member - IBM, T.J. Watson Research Center, NY  
Summer 91/2 High Performance Computing and Communications – IBM, NY  
1990-1992 Senior Lecturer - Elect. Eng., Technion  
1988-1990 Manager, Network Architectures and Algorithms - IBM, T.J. Watson Research Center, NY  
1985-1988 Research Staff Member- IBM, T.J. Watson Research Center, NY  
1984-1985 Lecturer - Electrical Engineering Dept., Technion  
1980-1984 Teaching Assistant and Instructor-Lecturer - Electrical Engineering Dept., Technion  
1981-1985 Founder and manager of R&D at Micronet Ltd - part time  
1977-1981 Hardware design leader at Mechkam Technologies - part time

## **Industrial and Technology Projects**

Manager of Network Architectures and Algorithms at IBM T.J. Watson Research Center: Leading a research group in various areas such as: high speed network architectures, distributed algorithms, network performance and a networking hardware lab. The main projects of the group were:

- The **PARIS** project - Design, analysis and implementation of a high-speed wide-area multi-media packet-switching network. The PARIS prototype (completed in 1987) supported data, voice and video real-time communication over 100Mbps links. PARIS was the world first wide area network to carry voice, video and data over high-speed hardware based packet switched infrastructure. A gigabit version of PARIS (named **plaNET**) was part of the national NSF/DARPA funded Aurora gigabit test-bed which connected various research centers in the US. Leading networking textbooks like the Bertsekas Gallager "Data Networking" and Craig Partridge "Gigabit Networks" have dedicated sections to the PARIS/plaNET technologies.
- The **Metaring** project - implementation and analysis of the first LAN/MAN based on buffer insertion ring with spatial reuse and integrated fairness and (completed in 1988). A gigabit version of Metaring was also part of the US information superhighway test-beds. The architecture, protocols and the

fairness algorithm of the Metaring have been by the SSA (**Serial Storage Architecture**) standard ("Serial Storage Architecture--Transport Layer, SSA-TL1," ANSI Standard X3T10.1/989D) for the connection of storage devices in large systems. This is the world first Storage Area Network (SAN) based on packet switching technology. IEEE 802.17 also adopted this basic architecture for metropolitan broadband networks.

Manager of High Speed Networking at Sun Microsystems Labs (1994-5): Initiating, leading and managing a research group in the area of ATM networking. Activities include: The OPENET project - an open and efficient ATM network control platform. Design and prototype of an ATM/Ethernet switching core on chip based on active ring technology (adopted by PMC Sierra).

Founder and Chief Technology Officer at Viola Networks: Along with Prof. Moshe Sidi, initiating and leading the architecture and definition of NetAlly, the first distributed network performance fault isolation system based on active network testing and end-through-end analysis. The system enables centralized automatic fault isolation and performance verification using a unique and novel combination of traffic generation, end-user emulation and real time correlation with network measurements. Has been involved in major business and capital raising activities including the establishment of major OEM agreements.

Co-founder and Chief Scientist for Actona Technologies: Along with Dr. Israel Ben-Shaul and Dr. Ilan Kessler, defined and architect an enterprise wide storage centralization system (ActaStor). This novel system connects and accelerates LAN file (CIFS and NFS) systems via the WAN using distributed peer-to-peer network of read/write file system caches. This allows organizations to operate their remote office file system at the data-center over the WAN. Technical consulting on networking, storage and protocol related issues.

Technion (1990-now):

- Co-founder (with Prof. Rom and Prof. Sidi) and first director of the Computer Networking Lab at the Technion. Established collaborative projects with the industry including: Tadiran, Intel, Sun Microsystems, IBM, Cisco, Chipcom, IIS and Bezek. The same team co-founded the MAGNET consortium for BroadBand Communication.
- In 2003, established with Dr. Ginosar and Dr. Kolodny the **QNOC** (Quality of Service Network on Chip) project that already several Master and PhD students. The project explores a revolutionary System on Chip architecture that connects internal chip modules via a standard interface using an internal network of micro-routers. QNOC is proven to have at least an order of magnitude improvement in area and power consumption over current in-chip interconnection technologies.

Micronet and Mechkam Technologies (1977-1985): was responsible for the hardware development at both companies. Leading R&D for the following products: hand-held data entry terminals, bar-code scanners and readers, communication protocol converters and multiplexers, field time attendance readers etc. A co-founders of Micronet a vendor of mobile data-entry equipment.

## ***Teaching Experience***

Teaching Assistant in Digital Communication, supervised student projects in digital systems and networking. Lecturer in: Digital Systems, Logic Design and Introduction to Computers, Data Networks, Introduction to Computer Networks, Micro-processors, Advanced topics in computer networks, Distributed Algorithms, Asynchronous Transfer Mode (ATM), Internet - protocols and architecture.

## ***Honors and Awards***

- Jordan and Irine Tark Chair (2004)
- IBM Outstanding Innovation Award for New Topology Maintenance Algorithms (Feb. 1993).
- IBM Outstanding Innovation Award for Packetized Automatic Routing Integrated System (Aug. 1989).
- Keynote speaker at the ACM-SIAM Symposium on Discrete Algorithms (SODA), Atlanta, Jan. 1996.
- Four IBM Patent Application Invention Award (Oct. 1988, May 1992, Feb. 1993, Jan. 1994).

- Louis and Miriam Benjamin Academic Lectureship in the Faculty of Elect. Eng. 1991/2.
- The B.Sc. Degree Summa Cum Laude.
- 3 times Technion's president award for distinguished students (1977-1980).

### ***Editorial and Conferences Activities***

- Founding editor for the IEEE/ACM Transaction on Networking (June 1992 until April 1997).
- Editor of Network Algorithms for the IEEE Transaction on Communications (1991-1993).
- Guest editor for *Algorithmica*, special issue on Algorithmic Aspects of Communications (1989).
- Vice Chairman of INFOCOM'96.
- Member of the program committee of INFOCOM'92, INFOCOM'93, INFOCOM'94, PODC'94, WDAG'95, INFOCOM'95, INFOCOM'97.
- Co-Chairman of DIMACS conference on Architecture & Algorithmic Aspects of Communication Networks, January 26-28, 1996.
- Member of the international advisory committee of ISSSTA'96.

### ***Membership in National Activities***

- Member of the National subcommittee for Information Technology and Infrastructure (1996-1999).
- Director and founder of the MAGNET Consortium for Broadband communication (1996-2000).
- Member of the Information Technology subcommittee of the US-Israel Science and Technology Commission (1996/7).

### ***Activities as a Referee in Professional Journals and Societies***

Reviewed proposals for National Science Foundation, US Army, Israeli fund of basic sciences.  
 IEEE Transactions on: Information Theory, Communications, Software Engineering, and Computers.  
 IEEE Journal on Selected Areas in Communications, Journal of the Association for Computing Machinery,  
 Journal of Algorithms, Information & Control, Siam Journal on Computing, Information Processing Letters.

### ***Departmental and Technion Activities***

- Head of Center for Communication and Information Technologies and EE industrial liaison program (since 2002)
  - Established close relationships with the industry including Intel, Cisco, IBM, El-Op, Elbit, Motorola, Qualcomm, Zoran, Marvel, Philips, Rafael and many more.
  - Formed an educational advisory board, scientific workshops, PhD lecture in the industry etc.
  - Raised more than \$600K in membership, labs supports, educational programs, equipment and research grants.
- Director of TIM - Technion Industrial Management Schools (2003-now)
- Member of the Technion's academic development committee (2001-3)
- Vice Dean for graduate students – EE Department, (1999-2000)
  - More than doubled the number of PhDs from a record 22 low.
  - Promoted and established the direct track to PhD.
- Member of the Technion Ethics committee (1999-2000)
- Supervisor for the design and construction of the Cogan Auditorium (1998)
- Member of the Technion Development and steering committee for computing and communication.
- Head of the EE faculty computer system administration (1992-93).
- Director (1992-3) and founder of the Computer Networking lab.

# LIST OF PUBLICATIONS

## 1. *Theses*

- (1. 1) D.Sc. Thesis: "Protocols Extension and Fail-Safe Communication in Computer Networks with Changing Topology". Thesis Supervisors: Prof. Raphael Rom and Prof. Adrian Segall.

## 2. *Original Papers in Professional Journals, with Referees.*

- (2.1) M. Sidi and I. Cidon, "Splitting Protocols in Presence of Capture", *IEEE Transactions on Information Theory*, Vol. IT-31, No. 2, pp. 295-301, March 1985.
- (2.2) I. Cidon and M. Sidi, "The Effect of Capture on Collision Resolution Algorithms", *IEEE Transactions on Communications*, Vol. COM-33, No. 4, pp. 317-324, April 1985.
- (2.3) I. Cidon and R. Rom, "Carrier Sense Access in an Environment of Two Interfering Channels", *Computer Networks and ISDN Systems*, Vol. 12, No. 1, pp. 1-10, August 1986.
- (2.4) I. Cidon and M. Sidi, "Erasures and Noise in Splitting Multiple-Access Algorithms", *IEEE Transactions on Information Theory*, Vol. IT-33, No. 1, pp. 132-143, January 1987.
- (2.5) I. Cidon, J. Jaffe and M. Sidi, "Local Distributed Deadlock Detection by Cycle Detection and Clustering", *IEEE Transactions on Software Engineering*, Vol. SE-13, No. 1, pp. 3-14, January 1987.
- (2.6) I. Cidon and R. Rom, "Fail-safe End-to-End Protocols in Computer Networks with Changing Topology", *IEEE Transactions on Communications*, Vol. COM-35, No. 4, pp. 410-413, April 1987.
- (2.7) I. Cidon, J. Jaffe and M. Sidi, "Distributed Store-and-Forward Deadlock Detection and Resolution Algorithms", *IEEE Transactions on Communications*, Vol. COM-35, No. 11, pp. 1139-1145, November 1987.
- (2.8) I. Cidon and M. Sidi, "Conflict Multiplicity Estimation and Batch Resolution Algorithms", *IEEE Transactions on Information Theory*, Vol. IT-34, No. 1, pp. 101-110, January 1988.
- (2.9) I. Cidon, "Yet Another Distributed Depth-First-Search Algorithm", *Information Processing Letters*, Vol. 26, pp. 301-305, January 1988.
- (2.10) I. Cidon and M. Sidi, "A Multi-Station Packet-Radio Network", *Performance Evaluation*, Vol. 8, No. 1, pp. 65-72, February 1988.
- (2.11) I. Cidon, H. Kodesh and M. Sidi, "Erasure, Capture and Random Power Level Selection in Multi-Access Systems", *IEEE Transactions on Communications*, Vol. COM-36, No. 3, pp. 263-271, March 1988.

- (2.12) I. Cidon and I.S. Gopal, "PARIS: An Approach to Integrated High-Speed Private Networks", *International Journal of Digital and Analog Cabled Systems*, Vol. 1, No. 2, pp. 77-86, April-June 1988.
- (2.13) I. Cidon, I. Gopal, G. Grover and M. Sidi, "Real Time packet Switching: A Performance Analysis", *IEEE Journal on Selected Areas in Communications*, Vol. SAC-6, No 9, pp. 1576-1587, December 1988.
- (2.14) I. Cidon, "An Efficient Distributed Knot Detection Algorithm", *IEEE Transactions on Software Engineering*, Vol. SE-15, No. 5, pp. 644-649, May 1989.
- (2.15) I. Cidon and M. Sidi, "Distributed Assignment Algorithms for Multi-Hop Packet-Radio Networks", *IEEE Transactions on Computers*, Vol. 38, No. 10, pp. 1353-1361, October 1989.
- (2.16) I. Cidon and I.S. Gopal, "Dynamic Detection of Subgraphs in Computer Networks", *Algorithmica*, Vol. 5, pp. 277-294, 1990.
- (2.17) C.T. Chou, I. Cidon, I.S. Gopal and S. Zaks, "Synchronizing Asynchronous Bounded Delay Networks", *IEEE Transactions on Communications*, Vol. COM-38, No. 2, pp. 144-147, February 1990.
- (2.18) I. Cidon and M. Sidi, "Recursive Computation of Steady-State Probabilities in Priority Queueing Systems", *Operations Research Letters*, Vol. 9, No. 4, pp. 249-256, July 1990.
- (2.19) I. Cidon, I. Gopal and R. Guerin, "Bandwidth Management and Congestion Control in plaNET," *IEEE Communication Magazine*, Vol. 29, No. 10, pp. 54-63, October 1991.
- (2.20) I. Cidon, J. Derby, I. Gopal and B. Kadaba, "A Critique of ATM from a Data Communication Perspective", *Journal of High Speed Networks*, Vol. 1, No. 4, pp. 315-336, 1992.
- (2.21) I. Cidon, A. Khamisy and M. Sidi, "Analysis of Packet Loss Processes in High-Speed Networks", *IEEE Transactions on Information Theory*, Vol. 39, No. 1, pp. 98-108, January 1993.
- (2.22) I. Cidon and Y. Ofek, "Metaring - A Full Duplex Ring with Fairness and Spatial Reuse", *IEEE Transactions on Communications*, Vol. 41, No. 1, pp. 110-120, January 1993.
- (2.23) I. Cidon, R. Guerin, A. Khamisy and M. Sidi, "Analysis of a Correlated Queue in Communication Systems", *IEEE Transactions on Information Theory*, Vol. 39, No. 2, pp. 456-465, March 1993.
- (2.24) M. Sidi, W. Z. Liu, I. Cidon and I. Gopal, "Congestion Control Through Input Rate Regulation", *IEEE Transactions on Communications*, Vol. 41, No. 3, pp. 471-476, March 1993.
- (2.25) I. Cidon, I.S. Gopal, and A. Segall, "Connection Establishment in High Speed Networks", *IEEE/ACM Transactions on Networking*, Vol. 1, No. 4, pp. 469-481, August 1993.
- (2.26) J. Chen, I. Cidon and Y. Ofek, "A Local Fairness Algorithm for Gigabit LANs/MANs with Spatial Reuse", *IEEE Journal on Selected Areas in Communications*, Vol. 11, No. 8, pp. 1183-1192, Oct 1993.
- (2.27) I. Cidon, I. Gopal, P. Gopal, R. Guerin, J. Janniello and M. Kaplan, "The plaNET/ORBIT High Speed Network", *Journal of High Speed Networks*, Vol. 2, No.3, 1993, pp. 171-208.
- (2.28) I. Cidon, A. Khamisy and M. Sidi, "On Queueing Delays of Dispersed Messages", in *Queueing Systems, Theory and Applications*, Vol. 15, pp. 325-346, 1994.

- (2.29) I. Cidon, R. Guerin and A. Khamisy, "On Protective Buffer Policies", *IEEE/ACM Transactions on Networking*, Vol. 2, No. 3, pp. 240-246, June 1994.
- (2.30) L. Georgiadis, R. Guerin and I. Cidon, "Throughput Properties of Fair Policies in Ring Networks", *IEEE/ACM Transactions on Networking*, Vol. 1, No. 6, pp. 718-728, December 1994.
- (2.31) I. Cidon, S. Kutten, Y. Mansour and D. Peleg, "Greedy Packet Scheduling", *SIAM Journal on Computing*, Vol. 24, No. 1, pp. 148-157, February 1995.
- (2.32) I. Cidon, I.S. Gopal, M. Kaplan and S. Kutten, "Distributed Control Architecture for High Speed Networks", *IEEE Transactions on Communications*, Vol. 43, No. 5, pp. 1950-1960, May 1995.
- (2.33) I. Cidon and R. Guerin, "plaNET Routing", book chapter in "Routing in Communication Networks", Manning Publications and Prentice-Hall, pp. 227-262 (1995).
- (2.34) I. Cidon, R. Guerin, I. Kessler and A. Khamisy, "Analysis of a Statistical Multiplexer with Generalized Periodic Sources", *Queueing Systems: Theory and Applications*, No. 20, 1995, pp. 139-169.
- (2.35) I. Cidon, I.S. Gopal and S. Kutten, "New Models and Algorithms for Future Networks", in *IEEE Transactions on Information Theory*, Vol. 41, No. 3, pp. 769-780, May 1995.
- (2.36) I. Cidon and Y. Shavitt, "Message Terminating Algorithms for Anonymous Rings of Unknown Size", *Information Processing Letters*, No. 54, pp. 111-119, April 1995.
- (2.37) I. Cidon, L. Georgiadis, R. Guerin and A. Khamisy, "Optimal Buffer Sharing", *IEEE Journal on Selected Areas in Communications*, special issue on "Advances in the Fundamentals of Networking," Vol. 13, No. 7, pp. 1229-1240, September 1995.
- (2.38) I. Cidon, R. Guerin, A. Khamisy and M. Sidi, "On Queues with Inter-arrival Times Proportional to Service Times", *Probability in the Engineering and Informational Sciences* Vol. 10, pp. 87-107, 1996.
- (2.39) I. Cidon, R. Guerin, A. Khamisy and K. Sivarajan, "Cell Versus Message Level Performance in ATM Networks", *Telecommunication Systems*, special issue on State-of-the-Art Issues in ATM Traffic, Vol. 5, No. 1-3, pp. 223-239, 1996
- (2.40) O. Gerstel, I. Cidon and S. Zaks, "Optimal Virtual Path Layout in ATM Networks with Shared Routing Table Switches", *Chicago Journal of Theoretical Computer Science*, October, 1996.
- (2.41) O. Gerstel, I. Cidon and S. Zaks, "The Layout of Virtual Paths in ATM Networks", *IEEE/ACM Transactions on Networking*, Vol. 4, No. 6, pp. 873-884, December 1996.
- (2.42) I. Cidon, R. Rom and Y. Shavitt, "Analysis of One-Way Reservation Schemes", *Journal of High Speed Networks*, Vol.5, No.4, pp. 347-364, 1996.
- (2.43) I. Cidon, A. Khamisy and M. Sidi, "Dispersed Messages in Discrete-Time Queues: Delay Jitter and Threshold Crossing", *Performance Evaluation*, Vol. 29, pp. 85-104, March 1997.
- (2.44) I. Cidon, L. Georgiadis, R. Guerin and Y. Shavitt, "Improved Fairness Algorithms for Rings with Spatial Reuse", *IEEE/ACM Transactions on Networking*. Vol. 5, No. 2, pp. 190-204, April 1997.
- (2.45) B. Awerbuch, I. Cidon, S. Kutten, Y. Mansour and D. Peleg, "Optimal Broadcast with Partial Knowledge", *SIAM Journal on Computing*, pp. 511-524, August 1998.

- (2.46) O. Gerstel, I. Cidon, S. Zaks, "Efficient support for client/server applications over heterogeneous ATM network. IEEE/ACM Transactions on Networking," pp. 432-446, August 1998.
- (2.47) I. Cidon, T. Hsiao, A. Khamisy, A. Parekh, R. Rom and M. Sidi, "OPENET: An Open and Efficient Control Platform for ATM Networks," Journal of High-Speed Networks, Vol. 8, pp. 195-210, 1999.
- (2.48) Israel Cidon, Raphael Rom, Yuval Shavitt: "Analysis of Multi-Path Routing," IEEE/ACM Transactions on Networking, pp. 885-896 June 1999.
- (2.49) O. Gurewitz, M. Sidi and I. Cidon, "The Ballot Theorem Strikes Again: Packet Loss Process Distribution," IEEE Transactions on Information Theory, Vol. IT-46, No. 7, pp. 2588-2595, November 2000.
- (2.50) B. Mizrahi, I. Cidon and M. Sidi "Distributed Protocols for Networks with Mobile users - The Mobilizer Approach," Wireless Networks: The Journal of Mobile Communication, Computation and Information, Vol. 7, pp. 21-31, 2001.
- (2.51) I. Cidon, S. Kutten and R. Sofer, "Optimal allocation of electronic content", Computer Networks Vol. 40, Issue 2, pp. 205-218, October 2002.
- (2.52) Y. Bejerano, I. Cidon and J. Naor, "Efficient Handoff Rerouting Algorithms: A Competitive On-Line Algorithmic Approach" IEEE/ACM Transactions on Networking, pp. 749-760, December 2002.
- (2.53) Y. Bejerano and I. Cidon, "An Anchor Chain Scheme for IP Mobility Management", Wireless Networks, pp. 409-420, September 2003.
- (2.54) Y. Bejerano, I. Cidon and J. Naor, "Dynamic Session Management for Static and Mobile Users: A Competitive On-Line Algorithmic Approach (Part II)" accepted to IEEE/ACM Transactions on Networking.
- (2.55) Y. Bejerano, I. Cidon and J. Naor, "Competitive Analysis Of Handoff Rerouting Algorithm", book chapter in: *Mobile and Wireless Internet: Protocols, Algorithms and Systems*, Kluwer Academic Publishers, Boston Hardbound, ISBN 0-7923-7208-5 July 2003.
- (2.56) E. Bolotin, I. Cidon, R. Ginosar and A. Kolodny, "QoS Architecture and Design Process for Cost Effective Networks on Chip", accepted to *Journal of Systems Architecture* special issue on Network on Chip.
- (2.57) E. Bolotin, I. Cidon, R. Ginosar and A. Kolodny, "Cost Considerations in Network on Chip", accepted to *Integration – The VLSI Journal* special issue on Network on Chip.
- (2.58) O. Unger and I. Cidon, "Optimal Content Location in IP Multicast Based Overlay Networks with Content Updates", accepted to *Journal of World Wide Web: Internet and Web Information Systems* special Issue on Web Servers and Content Distribution Networks (CDN)

## 2. Conference Papers

- (3.1) I. Cidon, I.S. Gopal and S. Kutten, "New Models and Algorithms for Future Networks", Proceedings of the Seventh ACM Symposium on Principles of Distributed Computing (PODC'88), pp. 75-89, August 1988.
- (3.2) A. Awerbuch, I. Cidon, I.S. Gopal, M. Kaplan and S. Kutten, "Distributed Control for PARIS", Proceedings of the Ninth ACM Symposium on Principles of Distributed Computing (PODC'90), pp. 145-159, August 1990.

- (3.3) A. Awerbuch, I. Cidon and S. Kutten, "Communication-Optimal Maintenance of Replicated Information", Proceedings of the 31st Annual Symposium on Foundation of Computer Science (FOCS'90), pp. 492-502, October 1990.
- (3.4) A. Awerbuch, I. Cidon, S. Kutten, Y. Mansour and D. Peleg, "Broadcast with Partial Knowledge" Proceedings of the Tenth ACM Symposium on Principles of Distributed Computing (PODC'91), pp. 153-164, August 1991.
- (3.5) I. Cidon and M. Sidi, "The Effect of Capture on Collision Resolution Algorithms", The International Symposium on Information Theory, Quebec, September 1983.
- (3.6) I. Cidon and M. Sidi, "The Effect of Capture on Collision Resolution Algorithms", GLOBECOM'83, pp. 35.5.1-35.5.5, San Diego, November 1983.
- (3.7) I. Cidon and M. Sidi, "A Single-Hop Multi-Station Packet-Radio Network", INFOCOM'84, pp. 336-343, San Francisco, April 1984.
- (3.8) I. Cidon and M. Sidi, "Slotted ALOHA in a Multi-Station Packet-Radio Network", ICC'84, pp. 438-442, Amsterdam, May 1984.
- (3.9) I. Cidon and M. Sidi "Forwarding Schemes in a Single-Hop Multi-Station Packet-Radio Networks", The 14-th Convention of Electrical & Electronics Engineers in Israel, pp. 2.2.2-1-4, Tel-Aviv, March 1985.
- (3.10) I. Cidon and M. Sidi, "Erasures and Noise in Splitting Multiple Access Algorithms", The International Symposium on Information Theory, Brighton, June 1985.
- (3.11) I. Cidon and M. Sidi, "Erasures and Noise in Splitting Multiple Access Algorithms", GLOBECOM'85, pp. 5.3.1-5.3.5, New Orleans, December 1985.
- (3.12) I. Cidon and M. Sidi, "Conflict Multiplicity Estimation and Batch Resolution Algorithms", INFOCOM'86, pp. 197-203, Miami, April 1986.
- (3.13) I. Cidon, J. Jaffe and M. Sidi, "Local Distributed Deadlock Detection with Finite Buffers", INFOCOM'86, pp. 478-487, Miami, April 1986.
- (3.14) I. Cidon, J. Jaffe and M. Sidi, "Global Distributed Deadlock Detection and Resolution with Finite Buffers", ICC'86, Toronto, June 1986.
- (3.15) I. Cidon, J. Jaffe and M. Sidi, "Local Distributed Deadlock Detection by Knot Detection", SIGCOMM'86, Vermont, August 1986.
- (3.16) I. Cidon, H. Kodesh and M. Sidi, "Erasure, Capture and Random Power Level Selection in Multi-Access Systems", International Symposium on Information Theory, Ann Arbor, October 1986.
- (3.17) I. Cidon, H. Kodesh and M. Sidi, "Erasure, Capture and Random Power Level Selection in Multi-Access Systems", INFOCOM'87, pp. 882-887, San Francisco, April 1987.
- (3.18) I. Cidon and I.S. Gopal, "Dynamic Tree Detection in Computer Networks", INFOCOM'87, pp. 181-187, San Francisco, April 1987.



- (3.19) I. Cidon, I.S. Gopal and H. Meleis, "PARIS: An Approach to Integrated Private Networks", ICC'87.
- (3.20) C.T. Chou, I. Cidon, I.S. Gopal and S. Zaks, "Synchronizing Asynchronous Bounded Delay Networks", 2nd International Workshop on Distributed Algorithms, Amsterdam, July 1987.
- (3.21) I. Cidon and M. Sidi, "A Distributed Assignment Algorithm for Multi-Hop Packet-Radio Networks", URSI, XXIIInd General Assembly, Tel-Aviv, August 1987.
- (3.22) I. Cidon and M. Sidi, "A Distributed Assignment Algorithm for Multi-Hop Packet-Radio Networks", INFOCOM'88, New Orleans, April 1988.
- (3.23) I. Cidon, I. Gopal, G. Grover and M. Sidi, "Memory Requirements for a Fast Packet Switching Node", ICC'88, Tel-Aviv, November 1988.
- (3.24) I. Cidon and M. Sidi, "Recursive Computation of Buffer Occupancy Probabilities in Priority Queueing Systems", INFOCOM'89, pp. 47-50, Ottawa, April 1989.
- (3.25) I. Cidon and Y. Ofek, "Distributed Fairness Algorithm for Local Area Networks with Concurrent Transmission", 3rd International Workshop on Distributed Algorithms, Nice, September 1989.
- (3.26) M. Sidi, W. Z. Liu, I. Cidon and I. Gopal, "Congestion Control through Input Rate Regulation", GLOBECOM'89, Dallas, November 1989.
- (3.27) I. Cidon and Y. Ofek, "Metaring - A Full Duplex Ring with Fairness and Spatial Reuse", in Proceedings of INFOCOM'90, pp. 969-981, San Francisco, 1990.
- (3.28) K. Bala, I. Cidon and K. Sohraby, "Congestion Control for High Speed Packet Switched Networks", in Proceedings of INFOCOM'90, pp. 520-526, San Francisco, 1990.
- (3.29) I. Cidon, I.S. Gopal, and A. Segall, "Fast Connection Establishment in High Speed Networks", ACM SIGCOM'90.
- (3.30) I. Cidon, I.S. Gopal, and S. Kutten, "Optimal Computation of Global Sensitive Functions in Fast Networks", 4th International Workshop on Distributed Algorithms, Bary, Italy, October 1990, also in IBM Research Report, no. RC 16352, August 1990.
- (3.31) I. Cidon, A. Khamisy and M. Sidi, "Analysis of Packet Loss Processes in High-Speed Networks", Proceedings of INFOCOM'92, pp. 242-251, Florence, May 1992.
- (3.32) I. Cidon and Y. Shavitt, "Message Terminate Algorithms for Anonymous Rings of Unknown Size", 6th International Workshop on Distributed Algorithms WDAG'92.
- (3.33) J. Chen, I. Cidon and Y. Ofek, "A Local Fairness Algorithm for Gigabit LANs/MANs with Spatial Reuse", GLOBECOM'92.
- (3.34) I. Cidon, R. Guerin, A. Khamisy and M. Sidi, "On Queues with Inter-Arrival Times Proportional to Service Times", Proceedings of INFOCOM'93, pp. 237-244, San-Francisco, April 1993.
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