

Curriculum Vitae

Angelos Bilas

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Contact Information

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Education

- Ph.D., Computer Science, Princeton University, August 1998.
Thesis title: Improving the Performance of Shared Virtual Memory on System Area Networks.
Advisor: Jaswinder Pal Singh.
- MA, Computer Science, Princeton University, May 1995.
- Diploma, Computer Science and Engineering, Computer Engineering and Informatics Department, Patras University, Patras, Greece, July 1993.

Professional Experience

- Associate Professor, Department of Computer Science, University of Crete, Greece, December 2003 - Today.
- Collaborating with Foundation for Research and Technology - Hellas, Institute of Computer Science, Greece, Sep 2002 - Today.
- Consultant, Storage Networks, May 2001 - June 2002.
- Member of Principal Design Team, Emphora Inc., September 2000 - May 2001.
- Assistant Professor, Department of Electrical and Computer Engineering, University of Toronto, August 1998 - August 2002.
- Visiting Scientist, IBM T.J. Watson Research Center, Summer 1995.

Research Interests

- Scalable Systems and Networks: System interconnects, network interfaces, and communication protocols. Block-level storage architectures, protocols, virtualization, and management. System performance, reliability, and programmability.
- Miniaturization of computer systems: Runtime system support and communication protocols for miniature systems and sensor networks.
- Computer Systems Security: Networked storage security, network interface and storage controller support for security.

Awards and Honors

- Marie Curie Excellent Teams Award. Grant UNISIX: Unifying System Interconnects, 2005-2009.
- Best Student Presentation Award at ICS'02 for "Parallelization and Performance of 3D Ultrasound Imaging Beamforming Algorithms on Modern Clusters".
- Nortel Junior Chair in Software Engineering, University of Toronto, since 1998.

Awarded Students

Ph.D. Thesis

- Michail Flouris, Ph.D. Thesis, University of Toronto, Toronto, Canada, February 2009. Extensible Networked-Storage Virtualization with Metadata Management at the Block Level.

Masters Thesis

- John Kesapidis, M.A.Sc. Thesis, University of Crete, March 2011. Dynamic Dependence Analysis on Multi-core Processors. (co-advised)
- Ioannis Klonatos, M.A.Sc. Thesis, University of Crete, February 2011. Design and Evaluation of Solid-State Drive (SSD) Caches to Improve Storage I/O Performance.
- Constantinos Koukos, M.A.Sc. Thesis, University of Crete, July 2010. Locality management in Task-based programming models. (co-advised)
- Markos Foundoulakis, M.A.Sc. Thesis, University of Crete, April 2010. DARC: Design and Evaluation of an I/O Controller for Data Protection.
- Thanos Makatos, M.A.Sc. Thesis, University of Crete, February 2010. ZBD: Using Transparent Compression at the Block Level to Increase Storage Space Efficiency.
- Michail Alvanos, M.A.Sc. Thesis, University of Crete, January 2010. Design and Evaluation of a Task-based Parallel H.264 Video Encoder for the Cell Processor.
- George Tzenakis, M.A.Sc. Thesis, University of Crete, October 2009. Tagged procedure calls (TPC): Efficient runtime support for task-based parallelism on the cell processor.
- Evangelos Mangas, M.A.Sc. Thesis, University of Crete, November 2008. Fine-grained Localization in Wireless Sensor Networks Using Audible Sound Transmissions and High Precision Clock Synchronization.
- Stavros Passas, M.A.Sc. Thesis, University of Crete, March 2008. Reducing host-level protocol overhead in high-speed Ethernet-based cluster interconnects.
- Georgios Kotsis, M.A.Sc. Thesis, University of Crete, November 2006. Improving scalability of Shared Memory Clusters.
- Georgios Panagiotakis, M.A.Sc., University of Crete, May 2006. Reducing Disk I/O Performance Sensitivity for Large Numbers of Sequential Streams.
- Dimitrios Xinidis, M.A.Sc. Thesis, University of Crete, November 2005. Performance Analysis and Scaling of Networked, Shared, Block-level Storage.
- John Yannakopoulos, M.A.Sc. Thesis, University of Crete, December 2004. CORMOS: A Communication-Oriented Runtime System for Sensor Networks.
- Ahmed AbdelKhalek, M.A.Sc. Thesis, March 2003. Parallelization and Performance of Interactive Multiplayer Game Servers.
- Rozalia Christodouloupoulou, M.A.Sc. Thesis, September 2002. Dynamic Data Replication: An Approach to Providing Fault-Tolerant Shared Memory Clusters.
- Reza Azimi, M.A.Sc. Thesis, August 2002. miNI: Minimizing Network Interface Memory Requirements with Dynamic Handle Lookup.
- Fan Zhang, M.Eng. Thesis, July 2002. Parallelization and Performance of 3D Ultrasound Imaging Beamforming Algorithms on Modern Clusters.
- Peter Jamieson, M.A.Sc. Thesis, January 2002. CableS: Thread and Memory Extensions to Support a Single Shared Virtual Memory Cluster Image.
- Jeffrey Tang, M.A.Sc. Thesis, October 2001. Tolerating Transient and Permanent Network Errors in System Area Networks.
- Courtney Gibson, M.A.Sc. Thesis, October 2000. Impact of Communication Layer Performance on Shared Virtual Memory Protocols for Clusters of SMPs.

Undergraduate Thesis

- Ioannis Gkiokas, Dimitrios Chassapis, Alexandros Labrineas, Charalampos Vatsolakis, Foivos Zakkak, Konstantinos Patsis, Konstantinos Hassapis, Leonidas Kosmidis, Athanasios Katsadimas, Yiannis Klonatos, Konstantinos Koukos, Michail Alvanos, Yiannis Kessapidis, Nikos Kabitakis, Zoe Sebepon, Giwrgos Tzenakis, Thanos Makatos, Markos Foundoulakis, Giorgos Kotsis, Dimitrios Xinidis, Christos Smaragdakis.

Ph.D. Committees

- Inigo Goiri, Multifaceted Resource Management on Virtualized Providers, UPC, Barcelona, Spain, June 2011.
- Elias Athanasopoulos, Modern Techniques for the Detection and Prevention of Web 2.0 Attacks. University of Crete, Greece, May 2011.

- Stamatis Kavadias, Direct Communication and Synchronization Mechanisms in Chip Multiprocessors. University of Crete, Greece, September 2010.
- Evangelos Koukis, I/O and scheduling support for efficient use of shared architectural resources in symmetric multiprocessors. NTUA, Greece, January 2010.
- Ricardo Fernandez Pascual. Fault Tolerant Cache Coherence Protocols for CMPs. University of Murcia, Spain, July 2009.
- Sven Karlsson. Shared Memory and OpenMP on Clusters. KTH, Sweden, 2004.
- Michalis Polychronakis. Generic Detection of Code Injection Attacks using Network-level Emulation. University of Crete, Greece, Oct. 2009.
- Spyros Antonatos. Defending against known and unknown attacks using a Network of Affined Honeypots. University of Crete, Greece, Oct. 2009.
- Evangelia Athanasaki, Non-linear storage transformations and prefetching techniques for exploiting reference locality in modern microprocessor architectures with multi-level memory hierarchies. NTUA, Greece, July 2006.

Research Funding

- CumuloNimbo: A Highly Scalable Transactional Multi-Tier Platform as a Service. STREP, Project #: 257993, Oct 2010-Sep 2013. PI: Angelos Bilas.
- IOLANES: Advancing the Scalability and Performance of I/O Subsystems in Multicore Platforms. STREP, Project #: 248615, Jan 2010 - Dec 2012. PI: Angelos Bilas. Project coordinator.
- SCALEWORKS: Parallel File System Support for Rapid Prototyping of Scalable Applications. Marie Curie Intra-European Fellowship. Nov. 1st, 2009 - Oct 31, 2011. PI: Kostas Magoutis. Host Scientist: Angelos Bilas.
- SCALUS: SCALING by means of Ubiquitous Storage Funding scheme. Marie Curie Initial Training Network, Project #: 238808, Dec 2009 - Nov 2012. PI: Angelos Bilas.
- STREAM: Scalable Autonomic Streaming Middleware for Real-Time Processing of Massive Flows of Data. FP7 STREP, Feb 2008 - Jan 2011. PI: Angelos Bilas.
- HiPEAC2: High-Performance Embedded Architecture and Compilation. FP7 EC-NoE, Jan 2008 - Dec 2010. co-PIs: Manolis Katevenis, Angelos Bilas
- Data and Storage Management in HellasGrid, GRNET, 45,000 Euros, Jan-Dec 2007. PI: Angelos Bilas
- SARC: Advanced Computing Architectures, FP6 FET STREP, 2006-2009. co-PIs: Manolis Katevenis, Angelos Bilas.
- Design and optimization of GRID services. General Secretariat for Research and Development (GSRT), Greece. PENED, 2006-2008. In collaboration with NTUA. PI: Angelos Bilas.
- HiPEAC1: High Performance Architecture and Compilation, NoE, FP6, 2004-2008. FORTH is regional coordinator. co-PIs: Manolis Katevenis, Angelos Bilas.
- COREGRID: European Research Network on Foundations, Software Infrastructures and Applications for large scale distributed, Grid and Peer-to-Peer Technologies, NoE, FP6, 2004-2008. co-PIs: Evangelos Markatos, Angelos Bilas.
- ATHLOS: International Reintegration Grant, Marie Curie Program, FP6, 2004-2008. PI: Angelos Bilas.
- UNISIX: Excellent Team Grant, Marie Curie Program, FP6, 2004-2008. PI: Angelos Bilas.
- SIVSS: STREP, IST, FP6, 2004-2006. co-PIs: Angelos Bilas, Manolis Katevenis.
- General Secretariat For Research and Technology (GSRT), Greece. PRAXE-A Program, 2004-2006. PI: Angelos Bilas.
- General Secretariat For Research and Technology (GSRT), Greece. International Collaborations Program, 9/2003-9/2005. PI: Angelos Bilas.
- General Secretariat For Research and Technology (GSRT), Greece. International Collaborations Program, 9/2003-9/2005. PI: Angelos Bilas.
- CFI/OIT/Microft Research, Equipment Infrastructure Grant, 2001-2003. PI: Angelos Bilas.
- Defense and Civil Institute of Environmental Medicine, High Resolution 3D Ultrasound Architecture, 2000-2002 co-PIs: Kostas Plataniotis, Angelos Bilas.
- Nortel Networks, 2000-2002. PI: Angelos Bilas.
- Nortel Institute for Telecommunications, Nortel Associates Program, 2000-2002.
- SUN Microsystems, Academic Equipment Grant, 2000-2001. PI: Angelos Bilas
- CITO, 2000-2002. co-PIs: Tarek Abdelrahman, Angelos Bilas.
- NSERC, 2000-2001, Computer Engineering Group Proposal, co-PIs: P. Chow et al.

- CFI/OIT/UoFT, Equipment Infrastructure Grant, 1999-2001. PI: Angelos Bilas.
- Bell Emergis, New Faculty Grant, 1999-2002. PI: Angelos Bilas
- Natural Sciences and Engineering Research Council (NSERC) of Canada, Research Grant, 1999-2003. PI: Angelos Bilas
- Connaught Committee, Research Grant, 1998-2002. PI: Angelos Bilas.
- Connaught Committee, Startup Grant, 1998-2002. PI: Angelos Bilas
- University of Toronto, Startup Grant, 1998-2002. PI: Angelos Bilas.

Teaching Activities

- CS527 Parallel Computer Architecture (grad, University of Crete): Fall 2010, Fall 2009, Fall 2008, Fall 2007, Fall 2006, Fall 2005, Fall 2004. **[Designed full course]**
- CS325 Embedded Systems (ugrad, University of Crete): Spring 2011, Spring 2010, Spring 2009, Spring 2006. **[Designed full course]**
- CS255 Software Systems (ugrad, University of Crete): Spring 2011, Spring 2010, Spring 2009, Spring 2008, Spring 2007, Spring 2006, Spring 2005. **[Designed full course]**
- CS425 Computer Architecture (ugrad, University of Crete): Fall 2006, Fall 2004, Fall 2003. **[Designed 1/3 of the course]**
- CS340 Languages and Compilers (ugrad, University of Crete): Spring 2004, Spring 2003. **[Designed full course]**
- CS225 Computer Organization (ugrad, University of Crete): Spring 2008, Spring 2007, Spring 2006, Spring 2005, Spring 2004.
- Invited Lectures, Scalable storage systems (grad, Universidad Politecnica de Madrid, Madrid, Spain): June 18-22, 2007. **[Lectures based on own research]**
- ECE344S Operating Systems (ugrad, University of Toronto): Spring 2000, Spring 1999. **[Designed part of the course]**
- ECE341F Computer Organization (ugrad, University of Toronto): Fall 2001. **[Designed part of the course]**
- ECE419F Distributed Systems (ugrad, University of Toronto): Fall 1999. **[Designed full course]**
- ECE1755F Parallel Programming and Parallel Computer Architecture (grad, University of Toronto): Fall 2001, Fall 1999, Fall 1998. **[Designed full course]**
- Invited lectures in the CETYS program (grad, University of Toronto): July 1999. **[Special course for professionals]**
- Invited lectures in the Master's in Engineering and Telecommunications Program (MET) (grad, University of Toronto): Feb. 1998. **[Special course for professionals]**
- Supervision of undergraduate thesis (ugrad, University of Toronto): Spring 2002, Spring 2001, Spring 2000, Spring 1999.

Department and University Service

- Univ. of Crete, CS Dept., Chair, Grad studies committee, 2010-2011, 2011-2012.
- Univ. of Crete, CS Dept., Member, Grad studies committee, 2008-2009, 2009-2010.
- Univ. of Crete, CS Dept., Member, Ugrad studies committee, 2004-2005, 2005-2006, 2006-2007.
- Univ. of Crete, CS Dept., Member, Graduate admissions committee, 2003-2004, 2007-2008.
- Univ. of Toronto, ECE Dept., Comp. Eng. Option Hooder, June Convocation, 2002.
- Univ. of Toronto, ECE Dept., Curriculum Review Committee, Chair of Area 6 (Software Systems), 2001-2002.
- Univ. of Toronto, ECE Dept., Computer Engineering graduate admissions coordinator, 1999-2000.
- Univ. of Toronto, ECE Dept., Student-Academic Staff Committee, 1999-2000, 2001-2002.
- Univ. of Toronto, ECE Dept., Undergraduate Workstations Lab Supervisor, 1999-2000.
- Univ. of Toronto, ECE Dept., Lecturer for High-school Students Lecture Series, 1999-2000, 2000-2001.

Summary of Committees & Professional Activities (For detailed references, please see Appendix I)

- **Editorial Boards:** JPDC (since May 1, 2011), IEEE CAL (since Dec 1, 2007).
- **PC Chair/co-Chair Conferences:** Cluster'10.
- **PC Vice-Chair Conferences:** HiPC'09, ICPP'08, EuroPar'06, ICPADS'06, ICPP'02.
- **PC Member Conferences:** Cluster'11, CF'11, SC'11, MSST2011, CCECE'11, ISPASS'11, HiPC'10, ICPP'10, CF'09, NAS'09, IPDPS'09, SRDS'08, ICDCS'08, IPDPS'08, HPCA-14 (2008), EDCC-7

(2008), HiPEAC'08, ICPP'07, IPDPS'07, Cluster'06, ICPP'06, ICDCS'06, HiPC'05, HPCA-11 (2005), PACT'04, EuroPar'04, ICPP'04, HPCA-10 (2004), IPDPS'04, ICPP'03, ISCA-30 (2003), IPDPS'03, SC'02, ICPP'01, ICPADS'01, ICS'00, ICPP'00, ICPADS'00.

- **Invited Participation:** OCIN'06 (NSF), SIAM'04.
- **PC Member Workshops:** SNAPI'11, WISTP'11, WISTP'10, SNAPI'10, WISTP'09, CAC'09, SNAPI'08, LASCO'08, PPABS'08, CAC'08, PDSEC'07, GADA'07, CAC'07, GridMiddleware'06, GADA'06, CAC'06, PDSEC'06, INSS'05, CAC'05, EGC'05, CAC'04, PADTAD-2 (2004), SAN-2 (2003), CAC'03, PADTAD-1 (2003), WTC'02, CANPC'00, CASCON'99.
- **PC co-Chair Summer Schools:** NIS'10, NIS'09.
- **Referee for (incomplete):** ISCA, ICPADS, PDPS, Supercomputing, PACT, PPOPP, ASPLOS, OSDI, HPCA, IPPS, ICPP, ICPC, FAST, EuroPar, JPDC, IEEE, CANPC, ICS, Computer, Journal of Systems and Software, IEEE Transactions on Computers, IEEE Transactions on Signal Processing, IEEE Transactions on Parallel and Distributed Systems.

Summary of Refereed Publications (For detailed references, please see below)

- **Conferences:** SAMOSXI'2011 [68], Syster'2010 [67], Eurosys'2010 [65], HiPEAC'2010 [63], ICS'09 [62], ICDCS'09 [61], ICDCS'09 [60], ICPADS'08 [59], ICS'07 [51], IPDPS'07 [50], ICS'06 [44], PPOPP'06 [43], IEEE Global Data Interoperability 2005 [42], MSST'05 [41], MSST'05 (short) [40], PDCS'04 [36], IPDPS'04 [35], MSST'04 [34], ICS'03 [32], HPCA9 (2003) [30], ICPP'02 [26], ICS'02 [25], ISCA29 (2002) [24], HPCA8 (2002) [22], HiPC'01 [20], ISPASS'01 [18], ICPP'01 [17], ICS'99 [16], ISCA26 (1999) [15], HPCA5 (1999) [14], SC'97 [12], ASPLOS8 (1998) [11], ICS'98 [10], HPCA4 (1997) [9], SC'97 [8], IPPS'97 [4], IPPS'97 [3], ISCA23 (1996) [1].
- **Journal and Book Chapters:** JPDC'2010 [66], Springer'08 [57], Springer'08 [55], Springer'08 [53], Springer'08 [52], Springer LNCS'07 [49], Springer'07 [48], Springer'07 [47], IEEE TPDS'05 [37], JPDC'03 [33], Special Issue of Cluster Computing 2002 [29], Special Issue of Cluster Computing 2002 [28], Annual Review of Scalable Computing 2002 [27], TOCS'01 [23], Springer'98 [13], JPDC'97 [7], IEEE Micro'97 [6].
- **Workshops:** SNAPI'2010 [64], CAC'08 [58], LASCO'08 [56], PCGrid'08 [54], RAIT'06 [46], HiPERIO'06 [45], CAECW-8 (2005) [39], EWSN'05 [38], SAN-2 (2003) [31], WC3 (2001) [21], WOMPAT'01 [19], HotInterconnects'97 (and special issue IEEE Micro'98) [5], WSSMM'96 [2].
- **Other:** PhDThesis[3], TechReport[2], UgradThesis[1], Ercim News (multiple issues).

List of Publications

Refereed Conference, Workshop, and Journal Publications

68. Michail Alvanos, George Tzenakis, Dimitrios S. Nikolopoulos, and Angelos Bilas. Design and Evaluation of a Task-based Parallel H.264 Video Encoder for Heterogenous Processors. In Proc. of the 2011 International Conference on Embedded Computer Systems: Architectures, Modeling, and Simulation (SAMOS XI), July 2011.
67. Markos Fountoulakis, Manolis Marazakis, Michail D. Flouris, and Angelos Bilas. Design and Evaluation of an I/O Controller for Data Protection. In The 3rd Annual Haifa Experimental Systems Conference (SYSTOR 2010), May 2010. [pdf]
66. Michail D. Flouris and Renaud Lachaize and Konstantinos Chasapis and Angelos Bilas. Extensible block-level storage virtualization in cluster-based systems. Journal of Parallel and Distributed Computing(2010):10.1016. [pdf]
65. Thanos Makatos, Yannis Klonatos, Manolis Marazakis, Michail D. Flouris, and Angelos Bilas. Using Transparent Compression to Improve SSD-based I/O Caches. In Proc. of The EuroSys 2010 Conference (Eurosys'2010), April 2010. [pdf].
64. Thanos Makatos, Yannis Klonatos, Manolis Marazakis, Michail D. Flouris, and Angelos Bilas. ZBD: Using Transparent Compression at the Block Level to Increase Storage Space Efficiency. In Proc. of The 6th IEEE International Workshop on Storage Network Architecture and Parallel I/O (SNAPI'2010), May 2010. [pdf].
63. George Tzenakis, Konstantinos Kapelonis, Michail Alvanos, Konstantinos Koukos, Dimitrios S. Nikolopoulos, and Angelos Bilas. Tagged procedure calls (TPC): Efficient runtime support for task-based parallelism on the cell processor. In Proc. of the 2010 International conference on High-Performance Embedded Architectures and Compilers (HiPEAC2010), January 2010. [pdf].
62. Stavros Passas, Kostas Magoutis, and Angelos Bilas. Towards 100 gbit/s ethernet: Multicore-based parallel communication protocol desgin. In Proc. of the 23rd ACM International Conference on

Supercomputing (ICS09), June 2009. [pdf].

61. George Panagiotakis, Michail D. Flouris, and Angelos Bilas. Reducing disk i/o performance sensitivity for large numbers of sequential streams. In Proceedings of The 29th International Conference on Distributed Computing Systems (ICDCS'09), June 2009. [pdf].
60. Evangelos Mangas and Angelos Bilas. Flash: Fine-grained localization in wireless sensor networks using acoustic sound transmissions and high precision clock synchronization. In Proceedings of The 29th International Conference on Distributed Computing Systems (ICDCS'09), June 2009. [pdf].
59. Michail D. Flouris, Renaud Lachaize, and Angelos Bilas. Orchestra: Extensible block-level support for resource and data sharing in networked storage systems. In In IEEE Intern. Conference on Parallel and Distributed Systems (ICPADS '08), December 2008. [pdf]. Also, as FORTH-ICS Technical Report TR-380-2006.
58. Stavros Passas, George Kotsis, Sven Karlsson, and Angelos Bilas. Exploiting spatial parallelism in ethernet-based cluster interconnects. In The workshop on Communication Architectures for Clusters (CAC'2008). Held in conjunction with IPDPS'08, April 2008. [pdf].
57. Maciej Brzezniak, Norbert Meyer, Michail Flouris, and Angelos Bilas. Evaluation of custom technology-based vs commodity technology-based Storage Elements, Book Chapter. In Book on Grid and Services Evolution, pages 1-9. Springer US, 2009. [pdf][ps.gz]. Also, in 3rd CoreGRID Workshop on Grid Middleware 2008, June 2008, Barcelona, Spain. Also, as CoreGRID Technical Report TR-0168, 2008.
56. Zoe Sebeopou, Kostas Magoutis, Manolis Marazakis, and Angelos Bilas. A comparative experimental study of parallel file systems for large-scale data processing. In LASCO'08: First USENIX Workshop on Large-Scale Computing, pages 1-10. USENIX Association, 2008. [pdf].
55. Jesus Luna, Michail Flouris, Manolis Marazakis, Angelos Bilas, Marios D. Dikaiakos, Harald Gjermundrod, and Theodoros Kyprianou. A data-centric security analysis of icgrid, book chapter. In Book on Grid Computing: Achievements and Prospects. S. Gorlatch, P. Fragopoulou, T. Priol (Eds.), pages 197-208. Springer US, 2008. [pdf][ps.gz]. An early version appeared in 3rd CoreGRID Integration Workshop, April 2-4, 2008; Integrated Research in Grid Computing; S. Gorlatch, P. Fragopoulou (eds.), Crete University Press, pp 165-176. Also, as CoreGRID Technical Report TR-0145.
54. Jesus Luna, Michail Flouris, Manolis Marazakis, and Angelos Bilas. Providing Security to the Desktop Data Grid. In Workshop on Desktop Grids and Volunteer Computing Systems (PCGrid'08). Held in conjunction with IPDPS'08, April 2008. [pdf]. Also, as CoreGRID Technical Report TR-0144.
53. Jesus Luna, Michail Flouris, Manolis Marazakis, Angelos Bilas, Federico Stagni, Alberto Forti, Antonia Ghiselli, Luca Magnoni, and Riccardo Zappi. An Analysis of Security Services in Grid Storage Systems, Book Chapter. In Book on Grid Middleware and Services, pages 171-185. Springer US, 2008. [pdf][ps.gz]. Also, in the CoreGRID Workshop on Grid Middleware. June 2007. Dresden, Germany. Held with the International Supercomputing Conference (ISC07). Also, as CoreGRID Technical Report TR-0090, 2007.
52. Maciej Brzezniak, Norbert Meyer, Michail Flouris, Renaud Lachaize, and Angelos Bilas. An Analysis of GRID Storage Element Architectures: High-end Fiber-Channel vs. Emerging Cluster-based Networked Storage, Book Chapter. In Book on Grid Middleware and Services, pages 187-201. Springer US, 2008. [pdf]. Also, in CoreGRID Workshop on Grid Middleware. June 2007. Dresden, Germany. Held with the International Supercomputing Conference (ISC07), Also, as CoreGRID Technical Report TR-0088, 2007.
51. M. Marazakis, V. Papaefstathiou, and A. Bilas. Optimization and Bottleneck Analysis of Network Block I/O in Commodity Storage Systems. In Proc. of the 21st ACM International Conference on Supercomputing (ICS07), June 2007. [pdf].
50. Stavros Passas, George Kotsis, Sven Karlsson, and Angelos Bilas. Multiedge: An edge-based communication subsystem for scalable commodity servers. In Proc. of the 21th International Parallel and Distributed Processing Symposium (IPDPS2007), March 2007. [pdf].
49. Z. Nemeth, M. Flouris, R. Lachaize, and A. Bilas. Support for Automatic Diagnosis and Dynamic Configuration of Scalable Storage Systems, Book Chapter. In Book on Euro-Par 2006: Parallel Processing, LNCS Series. Revised Selected Papers from Euro-Par Workshops. CoreGRID 2006 Workshop, Dresden, Germany, August 29-September 1, 2006, volume 4375, pages 15-21, 2007. [pdf][ps.gz]. Also, as extended abstract in CoreGRID Workshop on Grid Middleware. Held in conjunction with Euro-Par 2006, August 2006.
48. M. Flouris, R. Lachaize, and A. Bilas. Violin: a Framework for Extensible Block-Level Storage, Book

Chapter. In Book on Knowledge and Data Management in Grids, CoreGRID series, Springer Verlag, pages 83-98. Springer US, 2007. [pdf][ps.gz].

47. Z. Nemeth, M. Flouris, R. Lachaize, and A. Bilas. Conductor: Support for Autonomous Configuration of Storage Systems, Book Chapter. In Book on Knowledge and Data Management in Grids, CoreGRID series, Springer Verlag, pages 67-81. Springer US, 2007. [pdf][ps.gz]. Also, as CoreGRID Technical Report, TR-0057, 2006.
46. Manolis Marazakis, Vassilis Papaefstathiou, George Kalokairinos, and Angelos Bilas. Experiences from Debugging a PCI-X-based RDMA-capable Network Interface Card. In Third Workshop on Remote Direct Memory Access (RDMA): Applications, Implementations, and Technologies (RAIT 2006). In conjunction with the 2006 IEEE International Conference on Cluster Computing (Cluster2006), September 2006. [pdf].
45. M. Flouris, R. Lachaize, and A. Bilas. Using Lightweight Transactions and Snapshots for Fault-Tolerant Services Based on Shared Storage Bricks. In International Workshop on High Performance I/O Techniques and Deployment of Very Large Scale I/O Systems (HiperIO'06). In conjunction with the 2006 IEEE International Conference on Cluster Computing (Cluster2006), September 2006. [pdf].
44. M. Marazakis, K. Xinidis, V. Papaefstathiou, and A. Bilas. Efficient Remote Block-level I/O over an RDMA-capable NIC. In Proc. of the 20th ACM International Conference on Supercomputing (ICS06), June 2006. [pdf].
43. Rozalia Christodouloupoulou, Kaloian Manassiev, Angelos Bilas, and Cristiana Amza. Fast and transparent recovery for continuous availability of cluster-based servers. In Proc. of The 2006 ACM Symposium on Principles and Practice of Parallel Programming (PPoPP06), March 2006. [pdf].
42. Michail D. Flouris, Stergios Anastasiadis, and Angelos Bilas. Block-level Virtualization: How far can we go? In Proceedings of the Second IEEE-CS International Symposium on Global Data Interoperability - Challenges and Technologies, Sardinia, Italy, June 2005. [pdf].
41. Michail D. Flouris and Angelos Bilas. Violin: A Framework for Extensible Block-level Storage. In 13th NASA Goddard & 22st IEEE Conference on Mass Storage Systems and Technologies (MSST2005), Monterey, CA, April 2005. [pdf]. Also, as FORTH-ICS Technical Report TR-344-2004.
40. Dimitrios Xinidis, Michail D. Flouris, and Angelos Bilas. Performance Evaluation of Commodity iSCSI-based Storage Systems. In 13th NASA Goddard & 22st IEEE Conference on Mass Storage Systems and Technologies (MSST2005), April 2005. [pdf]. Short paper.
39. Dimitrios Xinidis, Michail D. Flouris, and Angelos Bilas. Virtual Timers: Using Hardware Physical Timers for Profiling Kernel Code-Paths. In Proc. of 8th Workshop on Computer Architecture Evaluation using Commercial Workloads (CAECW-8), February 2005. [pdf].
38. John Yannakopoulos and Angelos Bilas. Cormos: A communication-oriented runtime system for sensor networks. In Proc. of The Second European Workshop on Wireless Sensor Networks (EWSN 2005), February 2005. [pdf].
37. Yuanyuan Zhou, Angelos Bilas, Suresh Jagannathan, Dimitrios Xinidis, Cezary Dubnicki, and Kai Li. Vi-attached database storage. IEEE Transactions on Parallel and Distributed Systems, 16(1):35-50, 2005. [pdf].
36. C. Cavanna, T. Abdelrahman, A. Bilas, and P. Jamieson. Jupiter/svm: a jvm-based single system image for clusters of workstations. In Proc. of the 16th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS2004), November 2004. [pdf].
35. Ahmed Abdelkhalek and Angelos Bilas. Parallelization and performance of interactive multiplayer game servers. In Proc. of the 18th International Parallel and Distributed Processing Symposium (IPDPS2004), April 2004. [pdf].
34. Michail D. Flouris and Angelos Bilas. Clotho: Transparent data versioning at the block i/o level. In 12th NASA Goddard & 21st IEEE Conference on Mass Storage Systems and Technologies (MSST2004), April 2004. [pdf]. Also, FORTH-ICS Technical Report, TR-326-2003.
33. Angelos Bilas, Dongming Jiang, and Jaswinder Pal Singh. Shared virtual memory clusters: Bridging the cost-performance gap between smps and hardware dsm systems. Journal of Parallel and Distributed Computing, 63(12):1257-1276, December 2003. [pdf].
32. R. Azimi and A. Bilas. mini: Reducing network interface memory requirements with dynamic handle lookup. In Proc. of the 17th ACM International Conference on Supercomputing (ICS03), June 2003. [pdf].
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 27. A. Bilas and J. P. Singh. Experiences with shared virtual memory on system area interconnection networks: System simulation, implementation, and emulation. In Annual Review of Scalable Computing, volume 4. Edt: Yuen Chung Kwong. World Scientific Publishing Co., 2002. [pdf].
 26. J. Tang and A. Bilas. Tolerating network failures in system area networks. In Proc. of the 2002 International Conference on Parallel Processing (ICPP02), August 2002. [pdf].
 25. F. Zhang, A. Bilas, A. Dhanantwari, K. Plataniotis, R. Abiprojo, and S. Stergiopoulos. Parallelization and performance of 3D ultrasound imaging beamforming algorithms on modern clusters. In Proc. of the 16th ACM International Conference on Supercomputing (ICS02), June 2002. [pdf]. **Best Student Presentation Award.**
 24. Y. Zhou, A. Bilas, S. Jagannathan, C. Dubnicki, J. Philbin, and K. Li. Experiences with vi communication for database storage. In Proc. of the 29th International Symposium on Computer Architecture (ISCA29), May 2002. [pdf].
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 22. P. Jamieson and A. Bilas. Cables: Thread control and memory management extensions for shared virtual memory clusters. In Proc. of The 8th IEEE Symposium on High-Performance Computer Architecture (HPCA8), February 2002. [pdf].
 21. R. Christodouloupoulou and A. Bilas. Dynamic data replication for tolerating single node failures in shared virtual memory clusters of workstations. In Proc. of The Workshop on Caching, Coherence and Consistency (WC3 2001), June 2001. [pdf].
 20. C. Gibson and A. Bilas. Shared virtual memory clusters with next-generation interconnection networks and wide compute nodes. In Proc. of The 8th International Conference on High Performance Computing (HiPC01), December 2001. [pdf]. Also University of Toronto (Department of ECE) Technical Report TR-01-01-02.
 19. P. Jamieson and A. Bilas. Cables : Thread control and memory system extensions for shared virtual memory clusters. In Proc. of The Workshop on OpenMP Applications and Tools (WOMPAT2001), July 2001. [pdf].
 18. A. Abdelkhalek, A. Bilas, and A. Moshovos. Behavior and performance of interactive multi-player game servers. In Proc. of The 2001 International IEEE Symposium on Performance Analysis of Systems and Software (ISPASS01), November 2001. [pdf].
 17. A. Abdelkhalek, A. Bilas, and A. Michaelides. Parallelization, optimization, and performance analysis of portfolio choice models. In Proc. of the 2001 International Conference on Parallel Processing (ICPP01), September 2001. [pdf]. Also, University of Toronto (Department of ECE) Technical Report TR-01-01-01.
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 15. A. Bilas, C. Liao, and J. P. Singh. Using network interface support to avoid asynchronous protocol processing in shared virtual memory systems. In Proc. of the 26th International Symposium on Computer Architecture (ISCA26), May 1999. [pdf]. Also, as Princeton University (Computer Science Department) Technical Report TR-579-98.
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Report, TR-576-98.

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11. Y. Chen, A. Bilas, S. N. Damianakis, C. Dubnicki, and K. Li. UTLB: A mechanism for address translation on network interfaces. In Proc. of The 8th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS8), pages 193-203, San Jose, CA, October 1998. [pdf].
10. A. Bilas, L. Iftode, and J. P. Singh. Evaluation of hardware support for shared virtual memory clusters. In Proc. of the 12th ACM International Conference on Supercomputing (ICS98), July 1998. [pdf].
9. R. Samanta, A. Bilas, L. Iftode, and J. P. Singh. Home-based svm protocols for smp clusters: Design, simulations, implementation and performance. In Proc. of The 4th IEEE Symposium on High-Performance Computer Architecture (HPCA4), February 1998. [pdf].
8. A. Bilas and J. P. Singh. The effects of communication parameters on end performance of shared virtual memory clusters. In Proc. of The 1997 Supercomputing Conference on High Performance Networking and Computing (SC97), November 1997. [pdf]. **Best student paper finalist.**
7. A. Bilas and E. Felten. Fast RPC on the SHRIMP virtual memory mapped network interface. Journal of Parallel and Distributed Computing, 14:138-146, February 1997. [pdf].
6. S. Damianakis, A. Bilas, C. Dubnicki, and E.W. Felten. Client-server computing on shrimp. IEEE Micro. Volume 17:1, Pages 8-18, February 1997. [pdf].
5. C. Dubnicki, A. Bilas, Y. Chen, S. Damianakis, and K. Li. VMMC-2: efficient support for reliable, connection-oriented communication. In Proc. of The 1997 IEEE Symposium on High Performance Interconnects (HOT Interconnects V). Stanford, CA, USA., August 1997. [pdf]. A short version of this appears in IEEE Micro, Jan/Feb, 1998.
4. C. Dubnicki, A. Bilas, K. Li, and J. Philbin. Design and implementation of Virtual Memory-Mapped Communication on Myrinet. In Proc. of the 11th International Parallel Processing Symposium (IPPS97), pages 388-396, April 1997. [pdf].
3. A. Bilas, J. Fritts, and J. P. Singh. Real time parallel MPEG-2 decoding in software. In Proc. of the 11th International Parallel Processing Symposium (IPPS97), April 1997. [pdf]. Also, Princeton University (Computer Science Department) Technical Report TR-516-96.
2. A. Bilas, L. Iftode, D. Martin, and J. P. Singh. Shared virtual memory across SMP nodes using automatic update: Protocols and performance. In Sixth Workshop on Scalable Shared-Memory Multiprocessors. Cambridge, Massachusetts., October 1996. [pdf]. Also, as Princeton University (Computer Science Department) Technical Report, TR-517-96.
1. E.W. Felten, R.D. Alpert, A. Bilas, M.A. Blumrich, D.W. Clark, S. Damianakis, C. Dubnicki, L. Iftode, and K. Li. Early experience with message-passing on the shrimp multicomputer. In Proc. of the 23rd International Symposium on Computer Architecture (ISCA23), May 1996. [pdf].

Other Publications

3. A. Bilas. Improving the Performance of Shared Virtual Memory on System Area Networks. PhD thesis, Department of Computer Science, Princeton University, 35 Olden Str., Princeton, NJ-08544, USA, August 1998. [pdf]. Also, as Princeton University (Computer Science Department) Technical Report TR-586-98.
2. A. Bilas, C. Dubnicki, S. Damianakis, Y. Chen, and K. Li. Firmware support for reliable communication and dynamic system configuration in system area networks. Technical Report TR-581-98, Computer Science Department, Princeton University, 35 Olden Str., Princeton, NJ-08544, USA, June 1998. [pdf].
1. Thliviitis Theodoros and Angelos Bilas. Creation of realistic landscapes using fractals (in greek). Undergraduate Thesis, Department of Computer Engineering and Informatics, University of Patras, Patras GR-26500, Greece, May 1993. [pdf].

Patents

- "System and Method for Classifying and Storing Related Forms of Data". Inventors: Angelos Bilas and

Appendix I: Committees & Professional Activities

- Editorial Board, Subject Area Editor, Journal of Parallel and Distributed Computing (JPDC), Elsevier, May 1, 2011 - today.
- Editorial Board, IEEE Computer Architecture Letters. December 1, 2007 - today.
- Program Committee Member, 2011 IEEE International Conference on Cluster Computing (Cluster2011). Austin, Texas, USA, September 26-30, 2011.
- Program Committee Member, Computing Frontiers 2011 Conference (CF'11). Ischia, Italy. May 3-5, 2011.
- Program Committee Member, Track on Architecture and Networks, Supercomputing 2011 Conference (SC'11). Seattle, Washington, USA. November 2011.
- Program Committee Member, 7th International IEEE Workshop on Storage Network Architecture and Parallel I/O (SNAPI 2011). In conjunction with MSST'2011. Denver, Colorado, USA. May 25th, 2011.
- Program Committee Member, Research Track, 27th IEEE Conference on Mass Storage Systems and Technologies (MSST2011), May 23-27, 2011, Denver, Colorado.
- Program Committee Member, Workshop in Information Security Theory and Practices (WISTP'11), Heraklion, Greece. June 2011.
- Program Committee Member, Track on Computers, Software and Applications, 24th Annual Canadian Conference on Electrical and Computer Engineering (CCECE'11), May 8-11, 2011, Niagara Falls, Ontario, Canada.
- Program Committee Member, The 2010 IEEE International Symposium on Performance Analysis of Systems and Software, TBD, TBD. TBD, 2011.
- Program Committee Member, Track on Architecture, The 2010 International Conference on High Performance Computing (HiPC'2010), Goa, India. December 19-20, 2010.
- Program Committee co-Chair, 2010 IEEE International Conference on Cluster Computing (Cluster2010). Heraklion, Crete, Greece. September 20-24, 2010.
- Program Committee Member, Workshop in Information Security Theory and Practices (WISTP'10), Passau, Germany. April 2010.
- Program Committee Member, Track on Architecture, International Conference on Parallel Processing (ICPP2010). San Diego, CA, USA. September 13-16, 2010.
- Program Committee co-Chair, 3rd ENISA-FORTH Summer School on Network and Information Security 2010 (NIS'10), Heraklion, Greece. September 13-17, 2010.
- Program Committee Member, 6th International IEEE Workshop on Storage Network Architecture and Parallel I/O (SNAPI 2010). In conjunction with MSST'2010. Lake Tahoe, Incline Village, NV, USA. May 3rd, 2010.
- General co-chair, Workshop in Information Security Theory and Practices (WISTP'09), Brussels, Belgium. August, 2009.
- Program Committee Member, ACM International Conference on Computing Frontiers (CF'09), Ischia, Italy. May 18-20, 2009.
- Program Committee Member, Storage Track, The 2009 IEEE International Conference on Networking, Architecture, and Storage (NAS2009), Zhang Jia Jie, China. July 9-11, 2009.
- Vice Chair, Track on Architecture, The 2009 International Conference on High Performance Computing (HiPC'09), Cochin, India. December 17-20, 2009.
- Program co-Chair, 2nd ENISA-FORTH Summer School on Network and Information Security 2009 (NIS'09), Heraklion, Greece. September 14-18, 2009.
- Program Committee Member, 2009 Workshop on Communication Architecture for Clusters (CAC'09). In conjunction with IPDPS 2009. Rome, Italy. May 25, 2009.
- Program Committee Member, The 19th International Parallel and Distributed Processing Symposium (IPDPS'2009). Rome, Italy. May 25-29, 2009.
- Program Committee Member, The 27th IEEE International Symposium on Reliable Distributed Systems (SRDS 2008). Naples, Italy. Oct 6-8, 2008.
- Program Committee Member, 5th International IEEE Workshop on Storage Network Architecture and Parallel I/O (SNAPI 2008), In conjunction with MSST'2008. Baltimore, MD, USA. Sep 22, 2008.
- Program Committee Member, 1st Workshop on Large-Scale Computing (LASCO'08), co-located with

USENIX Annual Technical Conference 2008. Boston, MA, USA. June 22-27, 2008.

- Program Committee Member, 5th International IEEE Workshop on Storage Network Architecture and Parallel I/O (SNAPI 2008), In conjunction with MSST'2008. Baltimore, MD, USA. Sep 22, 2008.
- Program Committee Member, 2008 Workshop on Parallel Programming on Accelerator-Based Systems (PPABS'08). In conjunction with PPOPP 2008. Salt Lake City, UT, USA. Feb 23, 2008.
- Program Committee Member, 2008 Workshop on Communication Architecture for Clusters (CAC'08). In conjunction with IPDPS 2008. Miami, FL, USA. April 14-18, 2008.
- Program Committee Member, 2008 International Conference on Distributed Computing Systems (ICDCS 2008). Beijing, China. June 17-20, 2008.
- Vice Chair, Track on Architecture, International Conference on Parallel Processing (ICPP2008). Portland, Oregon, USA. September, 2008.
- Program Committee Member, The 19th International Parallel and Distributed Processing Symposium (IPDPS'2008). Miami, Florida, USA. April 14-18, 2008.
- Program Committee Member, 14th International Symposium on High Performance Computer Architecture (HPCA-14). Salt Lake City, UT, USA. February 16-20, 2008.
- Program Committee Member, The 7th European Dependable Computing Conference (EDCC-7). Kaunas, Lithuania. May 7-9, 2008.
- Program Committee Member, The 2008 International Conference on High-Performance Embedded Architectures and Compilers (HiPEAC'08). Goeteborg, Sweden. January 27-29, 2008.
- Program Committee Member, The 8th IEEE International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC-07), in Conjunction with The 21st International Parallel and Distributed Processing Symposium (IPDPS-07). Long Beach, California, USA. March 26-30, 2007.
- Program Committee Member, 2nd International Symposium on Grid computing, high-performance and Distributed Applications (GADA'07). Lisbon, Portugal. 28 Oct-2 Nov 2007.
- Program Committee Member, Track on Operating Systems and Resource Management, International Conference on Parallel Processing (ICPP2007). XiAn, China. September 10-14, 2007.
- Program Committee Member, Workshop on Communication Architecture for Clusters (CAC'07). In conjunction with IPDPS. Long Beach, CA, USA. March 26-30, 2007.
- Program Committee Member, The 18th International Parallel and Distributed Processing Symposium (IPDPS'2007). Long Beach, California, USA. March 26-30, 2007.
- Invited Participation, 2006 NSF Workshop on On- and Off-Chip Interconnection Networks for Multicore Systems (OCIN'2006). Stanford University, CA, USA. Dec 6-7, 2006.
- Book Editor, Knowledge and Data Management in Grids, Vol 3, CoreGRID series, Springer Verlag, July 2006. Editors: Domenico Talia, Angelos Bilas, and Marios Dikaiakos.
- Program Committee Member, CoreGRID Workshop on Grid Middleware. To be held in conjunction with Euro-Par 2006, Dresden, August 28-29, 2006.
- Organization Chair, 10th IFIP Conference on Communications and Multimedia Security, 19-21 Oct. 2006, Heraklion, Crete, Greece.
- Program Committee Member, IEEE International Conference on Cluster Computing (Cluster2006). Barcelona September 25th-27th, 2006.
- Program Committee Member, 1st International Symposium on Grid computing, high-performance and Distributed Applications (GADA'06). Montpellier, France, 29 Oct-3 Nov 2006.
- Vice Chair, Topic 13 - Routing and Communication in Interconnection Networks, Euro-Par 2006. Dresden, Germany. 29 August - 1st September 2006.
- Program Committee Member, Track on Architecture, International Conference on Parallel Processing (ICPP2006). Columbus, Ohio, USA. August 14-18, 2006.
- Program Committee Member, 2006 International Conference on Distributed Computing Systems (ICDCS 2006), July 4-7, 2006 in Lisboa, Portugal.
- Program Committee Member, Workshop on Communication Architecture for Clusters (CAC'06). In conjunction with IPDPS. Rhodes Island, Greece, April 25-29, 2006.
- Program Committee Member, The 7th IEEE International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC-06), in Conjunction with The 20th International Parallel and Distributed Processing Symposium (IPDPS-06). April 25-29, 2006, Rhodes Island, Greece.
- Vice Chair, Track on Communication and Interconnection Networks, 12th International Conference on Parallel and Distributed Systems (ICPADS'06), Minneapolis, MN, USA. July 2006.
- Program Committee Member, 2nd International Workshop on Networked Sensing Systems (INSS

2005). San Diego, CA, USA. June 2005.

- Program Committee Member, 12th Annual International Conference on High Performance Computing (HiPC), Goa, India. December 2005.
- Vice Chair, Track on Architecture, International Conference on Parallel Processing (ICPP2005). Oslo, Norway. August 2005.
- Program Committee Member, Workshop on Communication Architecture for Clusters (CAC'05). In conjunction with IPDPS. Denver, Colorado, USA April 4-8, 2005.
- Program Committee Member, European Grid Conference (EGC2005). Science Park Amsterdam, The Netherlands. February 14 -16 2005.
- Program Committee Member, Eleventh International Symposium on High Performance Computer Architecture (HPCA-11). San Fransisco, CA, USA. February 2005.
- Program Committee Member, The Thirteenth International Conference on Parallel Architectures and Compilation Techniques (PACT2004). Antibes Juan-les-Pins, France. September 2004.
- Program Committee Member, Euro-Par 2004. Pisa, Italy, 2004.
- Program Committee Member, Workshop on Communication Architecture for Clusters (CAC). In conjunction with IPDPS. Santa Fe, New Mexico Eldorado Hotel, April 26-30, 2004.
- Program Committee Member, Second Workshop on Parallel and Distributed Systems: Testing and Debugging (PADTAD-2). In conjunction with IPDPS. Santa Fe, New Mexico, USA, April 26-30, 2004.
- Program Committee Member, The 33rd International Conference on Parallel Processing (ICPP-2004). Montreal, Quebec, Canada, August 15-18, 2004.
- Invited Talk, Minisimposium on Alternative programming models for clustered HPC systems. Held with the Eleventh SIAM Conference on Parallel Processing for Scientific Computing. San Fransisco, CA. February 25-27, 2004.
- Program Committee Member, Tenth International Symposium on High Performance Computer Architecture (HPCA-10). Madrid, Spain. February 2004.
- Program Committee Member, The 15th International Parallel and Distributed Processing Symposium (IPDPS). Santa Fe, New Mexico. April 2004.
- Program Committee Member, Network-Based and Cluster Computing, International Conference on Parallel Processing (ICPP'2003). Kaohsiung, Taiwan, ROC. October, 2003.
- Session Chair, International Symposium on Computer Architecture, San Diego, USA. August June, 2003.
- Program Committee Member, The 30th International Symposium on Computer Architecture (ISCA). San Diego. June, 2003.
- Program Committee Member, 2nd Annual Workshop on Novel Uses of System Area Networks (SAN-2). In conjunction with HPCA-9. February, 2003.
- Program Committee Member, Workshop on Communication Architecture for Clusters (CAC). In conjunction with IPDPS. Nice, France. April 2003.
- Program Committee Member, First Workshop on Parallel and Distributed Systems: Testing and Debugging (PADTAD-1). In conjunction with IPDPS. Nice, France. April 2003.
- Program Committee Member, Supercomputing (SC02). Baltimore, Maryland, USA. November 2002.
- Session Chair, International Conference on Parallel Processing. Vancouver, Canada. August 2002.
- Vice Chair, Network-Based and Cluster Computing, International Conference on Parallel Processing. Vancouver, Canada. August 2002.
- Program Committee Member, World Telecommunications Congress (WTC). Paris, France. September 2002.
- Program Committee Member, International Conference on Parallel Processing (ICPP'2001). Valencia, Spain. September 2001.
- Program Committee Member, International Conference on Parallel And Distributed Systems (ICPADS'2001). KyongJu City, Korea. June 2001.
- Panel Moderator, International Conference on Parallel Processing. "Scalable computing infrastructure for scientific and commercial applications". Toronto, Canada. August 2000.
- Program Committee Member, Workshop on Software Distributed Shared Memory (WSDSM'00). In conjunction with the International Conference on Supercomputing (ICS'00). Santa Fe, New Mexico, USA. May 2000.
- Session Chair, International Conference on Parallel Processing (ICPP'2000). Toronto, Canada. August 2000.

- Program Committee Member, International Conference on Parallel Processing (ICPP'2000). Toronto, Canada. August 2000.
- Session Chair, Fifth Workshop on Languages, Compilers, and Run-time Systems for Scalable Computers (LCR'2000) (in cooperation with ACM SIGPLAN). Rochester, NY, USA. May 2000.
- Program Committee Member, Communication, Architecture and Applications for Network-based Parallel Computing (CANPC'2000) Workshop. In conjunction with the Sixth International Symposium on High Performance Computer Architecture (HPCA-6). Toulouse, France. January 2000.
- Program Committee Member, The 7th IEEE International Conference on Parallel and Distributed Systems (ICPP'2000). Iwate, Japan. July 2000.
- Invited Talk, Scalable Computing Infrastructure for Emerging Applications and Services. Nortel Networks, Ottawa, Canada. February 2000.
- Program Committee Member, IBM's Center for Advanced Studies 1999 CASCON Conference. Toronto, Canada. November 1999.
- **Referee for (incomplete):** ISCA, ICPADS, PDPS, Supercomputing, PACT, PPOPP, ASPLOS, OSDI, HPCA, IPPS, ICPP, ICPC, FAST, EuroPar, JPDC, IEEE, CANPC, ICS, Computer, Journal of Systems and Software, IEEE Transactions on Computers, IEEE Transactions on Signal Processing, IEEE Transactions on Parallel and Distributed Systems.