

Dilma M Da Silva

Professor, Department Head,
and Holder of the Ford Motor Company Design Professorship II
Interim Deputy Director of the Texas A&M Institute of Data Science

Dept of Computer Science and Engineering
Texas A&M University
3112 TAMU
College Station, TX 77843

Phone: 979-845-5820
Email: dilma@cse.tamu.edu
Homepage: faculty.cse.tamu.edu/dilma/

April 2018

Areas of Expertise

Cloud Computing, Operating Systems, Distributed Systems, Mobile Computing,
High Performance Computing, Large Scale Systems

Education

- Ph.D. in Computer Science, Georgia Institute of Technology, Atlanta, 1997
Advisor: Karsten Schwan
- M.Sc. in Computer Science, University of São Paulo, Brazil, 1990
Advisor: Arnaldo Mandel
- B.Sc. in Computer Science, University of São Paulo, Brazil, 1986

Professional Experience

- September 2014-present: Texas A&M University
 - September 2014-present: Department of Computer Science and Engineering
Department Head and Holder of the Ford Motor Company Design Professorship II
 - November 2017-present: Interim Deputy Director of the Texas A&M Institute of Data Science
- August 2012 - August 2014: Qualcomm Research Silicon Valley, California
Principal Engineer and Manager
Project Lead for Mobile Cloud
- October 2000 - July 2012: IBM T.J. Watson Research Center, New York
Research Staff Member at the Advanced Operating System Group
Manager January 2007 - July 2012
Led projects on virtualization, specialized execution environments, system software support for stream computing, operating system issues in massive multicore processors, file systems, and cloud computing.
Principal Investigator for the Exascale Collaboratory Group in Ireland, leading a group of 9 researchers and 20 post-docs (2011-2012)
Strategist for operating systems and hypervisors (2007-2012)
Project Lead for CloudBench, a cloud benchmarking tool adopted by the SPEC organization (2011-2012)
Key contributor to the Research Computing Cloud project (2009-2011)
Contributor to the IBM Smart Cloud (2011)
Key contributor to the Commercial Software System Scale-out project (2006-2007)

Key contributor to the K42 research operating system project (2000-2005)

- January 1997 - September 2000: Department of Computer Science, University of São Paulo, Brazil
Assistant Professor
Led system software research group; Chaired Graduate Admission Committee; Served on Graduate Programs Committee; Served on TA Assignment Committee; Served on Curriculum Restructuring Committee
Courses taught: on Operating Systems, Concurrent Programming, Software Engineering, Networking Systems (graduate and undergraduate level)
- August 1995 - December 1996: Senior Lecturer, University of São Paulo, Brazil
Courses taught: Computer Organization, Database Systems, Software Engineering.
- January 1995 - July 1995: Research Assistant, Georgia Institute of Technology, Atlanta
- August 1994 - December 1994: Teaching Assistant, Georgia Institute of Technology, Atlanta
- March 1987 - August 1990: Lecturer, University of São Paulo, Brazil
Courses Taught: Algorithms, Introduction to Computer Science, Programming Laboratory
- January 1985 - February 1987: Programmer (part time), School of Pharmacology, University of São Paulo

Professional Honors and Awards

- CSE Teaching Award, 2016
- ACM Distinguished Scientist, 2011
- 2011 IBM Research Division Award
- ACM Distinguished Speaker, 2009-2014
- Pat Goldberg Best Paper Award, 2009
- Best Paper Award at USENIX File and Storage Technologies (FAST) Conference, February 2008
- Research Productivity Award, from the Brazilian Federal Research Agency (CNPq), March 1997 - September 2000
- Doctoral Fellowship, from the Brazilian Federal Research Agency (CNPq), September 1990 - July 1994

Professional Activities

- member of CRA-W board (2008-present)
- USENIX liaison for the OSDI/SOSP Diversity Workshop Series (2014-present)
- Founding Leader of Latinas in Computing group (2007-present)

- committee member at CDC - The Coalition to Diversity Computing (2011-2016)
- Chair of ACM Senior Award Committee (2014-2015)
- treasurer of ACM SIGOPS (elected, July 2011-June 2015)
- speaker for the ACM Distinguished Speaker Program (2009-2014)
- Director for Events, Brazilian Computer Society (July 1999-June 2001)
- Member of Educational Board for the Brazilian Computer Society (October 1999-September 2000)
- Member of ACM, Usenix, IEEE, IEEE Computer Society, and Brazilian Computer Society
- Mentor for Mentornet, Empowering Leadership Alliance, IBM MentorPlace Middle School Program (2002-2012), Stanford WEE Big/Little Syster Program (Fall 2012 - Spring 2013)

Research Advising

- Current students
 - Katie Godfrey (Ph.D., since Spring 2018)
 - Cameron Smith (MS, since Fall 2015)
 - John Goen (MS, since Fall 2017)
 - Rafael Bortolatto (MS, since Spring 2018)
- Graduated at University of São Paulo, Masters with Thesis:
 - Livio Soares (2003)
 - Ana Paula Gladcheff (2001)
 - Jorge Euler Vieira (2000)
 - Uira Kulesza (2000)
 - Maria do Carmo Garcia Noronha (2000)
 - Clovis Seragiotto Junior (2000)
 - Edson Noburu Yamada (1997)
- Undergraduate students:
 - David LaCroix (Fall 2015 - Spring 2016), received TAMU Best Undergraduaate Thesis Award in Science and Engineering
 - REU summer students: Aden Muhammad (2016), Susana Cabellero Lugo (2015), Alyssa Crider (2015), Henry Serrano Echeverria (2015), Savannah Wheeler (2015)
- PhD Committees at Texas A&M University
 - Mengyuan Chao (advisor Radu Stoleru)
 - Samira Mirbagher (advisor Daniel Jimenez)
 - Sangam Jindal (advisor Daniel Jimenez)
 - Hamzi Mao (advisor Nick Duffield)
 - Nic Lupfer (advisor Andruid Kerne)

- MS Committees at Texas A&M University
 - Yukun Zhang (advisor Radu Stoleru)
 - Tianbo Qu (advisor Jiang Hu)
 - Siddhant Rath (advisor Rabi Mahapatra, graduated in 2018)
 - Matthew Carrasco (advisor Andruid Kerne, graduated in 2018)
- Advisees graduating with MS without thesis: Richa Surbhi (2017)
- Temporary advisees: Haifeng Jin (Fall 2015 to Spring 2016)
- Student Organization: BRSA (Brazilian Student Association, since May 2017)
- At Qualcomm Research, 3 summer internship students
- At IBM Research, 17 summer internship students and 6 post-docs

Research Support

- The Texas A&M Cyber Leader Scholarship Program: Developing (1754101); NSF; PI: D. Ragsdale; Co-Pis: R. Jones, P. deWitte, G. Gu, D. Da Silva; \$ 4500,000; 01/01/18 to 12/31/22
- BD Spokes: SPOKE: South: Collaborative: Smart Grids Big Data (IIS-1636772), NSF; PI: M. Kezunovic; Co-PIs: L. Xie, D. Da Silva, P. Kumar; \$ 716,949; 09/01/16-08/31/20
- Travel grant for USENIX ATC'17 (); NSF; PI: Dilma Da Silva; \$ 20,000; 07/08/17 to 01/31/18
- ACCORDS - Automatically Configurable Component-based and Reflective Distributes Systems), NSF/CNPq (Brazilian National Research Council; 1999-2000
- SIDAM - Distributed Information Systems for Mobile Agents; FAPESP (São Paulo State Research Agency; 1998-2000
- RAMS - Regional Atmospheric Modeling System; Brazilian Ministry of Science and Technology; 1997-1999

Editorial Work

- Associate Editor, Journal of Parallel and Distributed Computing (2015-present)
- guest editor for the Journal of Internet Services and Applications special issue on Cloud Computing, 2011
- guest editor for ACM SIGOPS Operating System Review, January 2008
- guest editor for the Special Issue on Adaptive Software Systems for the Journal of the Brazilian Computer Society, 2004
- member of Editorial Board for the Journal of the Brazilian Computer Society (2000-2004)

Steering Committees

- steering committee of *ACM Symposium on Operating Systems Principles* (SOSP) since 2015
- steering committee of *USENIX HotCloud* (since 2015)
- steering committee of *IEEE International Conference on Internet-of-Things Design and Implementation* (since 2015)
- steering committee of the *IEEE International Conference on Cloud Engineering* (since 2012)
- steering committee of *ACM Virtual Execution Environments* (VEE) conference (member 2012, chair 2013-2014)

Program Chair and Event Organization

1. General Chair for the 2016 ACM Tapia Celebration of Diversity in Computing
2. Area co-chair for ICDCS'16 (International Conference on Distributed Computing Systems), cloud and datacenters track
3. area chair of IEEE CLOUD'15 (8th IEEE International Conference on Cloud Computing)
4. area chair SBAC-PAD'15 (27th International Symposium on Computer Architecture and High Performance Computing), Distributed Systems and Networks Track
5. chair of industry track at IC2E 2014 (IEEE International Conference on Cloud Engineering)
6. co-chair of USENIX HotCloud'13 (5th USENIX Workshop on Hot Topics in Cloud Computing)
7. co-chair of Grace Hoper 2012 PhD Forum
8. program chair of VEE 2012 (8th ACM SIGPLAN/SIGOPS International Conference on Virtual Execution Environments)
9. industry track co-chair at Middleware 2011 (12th ACM/IFIP/USENIX International Middleware Conference)
10. workshop/tutorial co-chair at HiPEAC 2012 (7th International Conference on High-Performance and Embedded Architectures and Compilers)
11. co-chair of Senior Women Summit at GHC'2012
12. co-chair, SBESC/WSO 2011 (VII Brazilian Workshop in Operating Systems, part of the Brazilian Symposium on Computing Systems Engineering)
13. scholarship co-chair, SOSP'2011 (23rd ACM Symposium on Operating Systems Principles)
14. session co-chair, National Academy of Engineering's Frontier of Engineering 2010
15. co-chair, SYSTOR 2010 (3rd Annual Haifa Experimental Systems Conference)

16. co-chair, WSO 2010 (VII Brazilian Workshop in Operating Systems)
17. co-chair of Invited Speakers, GHC'2010 (Grace Hopper Celebration of Women in Computing)
18. vice-chair, SBAC-PAD 2009 (21st International Symposium on Computer Architecture and High Performance Computing)
19. publicity chair, SOSP'09 (22nd ACM Symposium on Operating Systems Principals)
20. co-chair, SOSP Diversity Workshop 2009
21. international liaison co-chair for the Fourth Latin-American Symposium on Dependable Computing (LADC2009)
22. co-chair, MMCS 2009 (co-located with ACM ASPLOS)
23. co-chair, PLOSA 2009 (co-located with ACM ASPLOS)
24. co-chair, Usenix Diversity 2008 (Workshop on Supporting Diversity in Systems Research, co-located with OSDI)
25. co-chair, MMCS 2008 (co-located with HPDC)
26. co-chair, WSO 2006 (3rd Brazilian Workshop in Operating Systems)
27. co-chair, WSO 2004 (1st Brazilian Workshop in Operating Systems)
28. co-chair, Brazilian School of Computer Science, 2000

Program Committees

1. Middleware (ACM/IFIP/USENIX International Middleware Conference): 2018, 2013, 2012, 201
2. ICDCS (International Conference on Distributed Computing Systems): 2018, 2015, 2014
3. IC2E ((IEEE International Conference on Cloud Engineering): 2018, 2016, 2015 (industry track), 2014
4. IEEE International Congress on Big Data - Work in Progress: 2018
5. BDCOM (IEEE Big Data Workshop on Cloud Operations Management): 2017
6. SOCC (ACM Symposium on Cloud Computing): 2016, 2015, 2010
7. USENIX (Annual Technical Conference): 2016, 2015, 2014, 2011
8. SC ((Supercomputing - International Conference on High Performance Computing, Networking, Storage, and Analysis): 2016 (system software track), 2015 (performance track, Posters), 2014 (Posters, Birds-of-Feather), 2013 (Posters)
9. VEE (ACM SIGPLAN/SIGOPS International Conference on Virtual Execution Environments): 2016, 2015, 2014, 2011
10. SBAC/PAD (International Symposium on Computing Architecture and High Performance Computing): 2016, 2014, 2012, 2011, 2010

11. USENIX HotCloud: 2015
12. IPDPS (IEEE International Parallel & Distributed Processing Symposium): 2015, 2014, 2013
13. VTDC (International Workshop on Virtualization Technologies in Distributed Computing): 2015, 2013, 2011, 2010, 2009
14. SBESC ((Brazilian Symposium on Computing Systems Engineering): 2015, 2014, 2013, 2012
15. SYSTOR (International Systems and Storage Conference): 2015, 2013, 2012, 2009, 2007
16. Tapia (ACM Richard Tapia Celebration of Diversity in Computing): 2015 (Doctoral Consortium and Poster Committees), 2014 (Workshop and Poster Committees)
17. DAIS-DisCoTec (IFIP International Conference on Distributed Applications and Interoperable Systems, co-located with 10th International Federated Conference on Distributed Computing Techniques): 2015
18. LATINITY (Latin American Women in Technology Conference): 2015
19. ICAC (International Conference on Autonomic Computing): 2014
20. HPDC (International ACM Symposium on High Performance Parallel and Distributed Computing): 2014
21. ICS (ACM International Conference on Supercomputing): 2014
22. GHC ((Anita Borg Institute Grace Hopper Celebration of Women in Computing): 2015 (Scholarship Reviewer), 2014 (Career Track, Scholarship, WURG), 2013 (Scholarships), 2012 (WURG, Scholarships, Birds-of-Feather), 2011 (PhD Forum, Workshop and Panels), 2004 (Invited Talks Committee), 2002
23. CLOUD (IEEE International Conference on Cloud Computing): 2014
24. INFLOW ((Workshop on Interactions of NVM/Flash with Operating Systems and Workloads, co-located with SOSP or OSDI): 2013
25. LatinCloud (IEEE Latin American Conference on Cloud Computing and Communications): 2012
26. EUC (IEEE/IFIP International Conference on Embedded and Ubiquitous Computing): 2012
27. SEKE (International Conference on Software Engineering and Knowledge Engineering): 2012, 2011
28. SMTPS (International Workshop on System Management Techniques, Processes, and Services): 2012, 2011, 2010, 2009
29. WoSiDA (Workshop on Autonomic Distributed Systems, co-located with SBRC - Brazilian Symposium on Computer Networks and Distributed Systems): 2012
30. NAS (IEEE International Conference on Networking, Architecture, and Storage): 2011, 2009

31. WIOV (Workshop on I/O Virtualization): 2011
32. ApSys (ACM SIGOPS Asia-Pacific Workshop on Systems): 2011
33. WSCAD-SSC (Brazilian Symposium on High Performance Computational Systems): 2011 (general track and dissertation contest), 2010, 2009, 2008
34. CloudApp (IEEE International Workshop on Applied Cloud Computing): 2011
35. CAOS (Workshop on Computer Architecture and Operating System co-design, co-located HiPEAC): 2011
36. SNAPI (IEEE International Workshop on Storage Network Architecture and Parallel I/Os): 2010, 2008, 2007, 2004
37. MobiCloud (International Workshop on Mobile Computing and Clouds): 2010
38. HotSWUp (ACM Workshop on Hot Topics in Software Upgrades): 2009, 2008
39. MuCoCoS (International Workshop on Multi-Core Computing Systems): 2009
40. WSO (Brazilian Workshop in Operating Systems); 2009, 2008, 2007, 2005,
41. Brazilian Workshop in High Performance Computing, 2007, 2006, 2005
42. SBLP (Brazilian Symposium on Programming Languages): 2000, 2000, 1999 , 1997
43. SBC Thesis and Dissertation Competition: 2000, 1998,
44. Workshop on Wireless Communication: 2004, 2003
45. SBRC (Brazilian Symposium on Computer Networks): 2000

Reviewer for: Communications of the ACM; ACM Computing Survey; Journal of the Brazilian Computer Society; Journal RITA; IBM Systems Journal; Brazilian Symposium on Software and Hardware; Brazilian Symposium on High Performance Computing; Brazilian Symposium on Fault Tolerance; Brazilian Symposium on Programming Languages; Brazilian Symposium on Computer Networks; International Workshop on Storage Network Architecture; International Conference on High Performance Computing and Applications; Brazilian Workshop on Aspect-Oriented Software Development; ASPLOS'2004; HPCA'2004; IEEE International Symposium on High Performance Distributed Computing (HPDC); IEEE International Parallel & Distributed Processing Symposium (IPDPDS); Eurosys'2006; Generative Programming and Component Engineering (GPCE), 2006; ICPP'06; Brazilian Dissertation Competition 2007; ICS'07; PACT'07; SOSP'07; Computing Frontiers Conference; ISCA'08; IEEE Pervasive Computing Journal; IEEE Transactions on Service Computing, IEEE Transactions on Cloud Computing, IEEE Transactions on Parallel and Distributed Systems ASPLOS'2015

Participation on Judging Boards and Committees

- ACM Senior Member Committee (since 2012)
- 4 NSF panels
- member of 30 Thesis Committees
- member of 2 Tenure Track Committees at Brazilian Universities
- member of dozens of PhD Qualifying Exams boards

Selected Talks and Panels

1. Panel “The Importance and Role of Teaching Track Faculty in Ph.D. Granting Institutions” at SIGCSE’18
2. CRA mentoring sessions at Grad URMD Cohort 2018: “Publishing your Research”, “Academy vs Industry: Choose your own adventurer”, and “Overcoming Insufficient Academic Preparation: Perceived and Real”, March 2018
3. Talk “Edge computing: how low will the clouds fall?” at Florida International University, October 2017
4. CRA-W mentoring sessions at Grad Cohort 2017: “Financially supporting your graduate education”, “Academy vs Industry: Choose your own adventurer” Real”, April 2017
5. Talk “Cloud services for the Internet of Things” at University of Houston, October 2016
6. Talk “Finding your dream job” at CRA-W Track at Grace Hopper, October 2016
7. Tutorial “All you wanted to know about cloud computing” at Texas A&M Big Data Conference, September 2016
8. Talk “Case Studies on IoT workload characterization” at the MSR Summit Cloud Workshop, July 2016
9. Talk “Cloud services for the Internet of Things” at University of Sao Paulo, Brazil, June 2016
10. Talk “Looking back at my CS undergrad days – what did I do right?” at University of Sao Paulo, Brazil, June 2016
11. Talk “Cloud services for the Internet of Things” at UNICAMP, Brazil, June 2016
12. Talk “Cloud computing: dreams, nightmares” at Colorado State University, April 2016
13. Talk “Cloud services for the Internet of Things” at Colorado State University, April 2016
14. CRA-W mentoring sessions at Grad Cohort 2016: “Financially supporting your graduate education”, “Publishing your Research”, April 2016
15. Talk “Cloud services for the Internet of Things” at Wayne State University, December 2015
16. Talk “Effectively Communicating Scientific Research” and Panel “Obtaining Employment and Successfully Negotiating: Academia, Industry and National Labs” at the SHPE (Society of Hispanic Professional Engineers) Conference, November 2015
17. Talk “Cloud Services for IoT” at IBM TJ Watson Research Center, October 2015
18. CRA-W mentoring session at GHC’15: Leadership Workshop for Mid-Career/Senior Faculty Mentoring, October 2015
19. Panel “Career Change” at SOSP Diversity Workshop, October 2015
20. Talk “Negotiating Skills” at CRA-W Early Career Mentoring Workshop, June 2015
21. Talk “Job Search” at CRA-W Early Career Mentoring Workshop, June 2015

22. Keynote talk “Mobile Cloud Computing” at 2015 ACM Tapia Celebration of Diversity in Computing
23. Talk “How to grow your research group” at CRA-W Mentoring Workshops at 2015 ACM Tapia Celebration of Diversity in Computing
24. Panel “Why Women in Tech Should Patent Ideas” at GHC’2014 (Grace Hopper Celebration of Women in Computing), October 2014
25. Talk “Preparing for Promotion” at GHC’2014 CRA-W Mentoring Workshop (Grace Hopper Celebration of Women in Computing), October 2014
26. Invited Talk at WISE 2014 (Women’s Institute on Summer Enrichment), hosted at Cornell University
27. Keynote at SBRC’14 (32nd Brazilian Symposium on Computer Networking and Distributed Systems), May 2014
28. CRA-W Graduate Co-hort, April 2014
29. Panelist at NCWIT Aspiration Award Career Panel, March 2014
30. Keynote at STARS Celebration 2014
31. Keynote at ICAC’13 (10th International Conference on Autonomic Computing), June 2013
32. CRA-W Graduate Co-hort, March 2013
33. Distinguished Lecture at University of Delaware, February 2013
34. CRA-W Advanced Career Mentoring Workshop for Women in Research Labs, November 2012
35. Distinguished Lecture at PSG, Coimbatore, India, May 2012
36. Distinguished Lecture at Coimbatore Institute of Technology, India, May 2012
37. Invited talk at Indian Institute of Science, Bangalore, May 2012
38. Distinguished Lecture at Duke University, January 2012
39. Panel at Middleware 2011 Doctoral Symposium, December 2011
40. Invited talk at SBESC’2011, November 2011
41. Keynote speaker at ANCS2011 (ACM/IEEE Symposium on Architectures for Networking and Communications Systems), October 2011
42. Marista College, September 2011
43. North Carolina State University, April 2011
44. Academic Mentoring Program (CDC/CMD-IT, CAHSI, AccessComputing), February 2011
45. Texas A&M University, Computer Science and Engineering, November 2010

46. South American Finals of the ACM International Collegiate Programming Contest, October 2010
47. Cloud Computing panel at SYSTOR, May 2010
48. CRA-W Graduate Co-hort, March 2010
49. SECOMU at Congress of the Brazilian Computer Society, July 2009
50. WIT at Congress of the Brazilian Computer Society, July 2009
51. Cloud Computing JAI at Congress of the Brazilian Computer Society, July 2009
52. Oklahoma State University, December, 2009
53. Cloud Computing Panel at SBAC'2009
54. Missouri Science and Technology, November, 2009
55. University of New Mexico, April 2009
56. CRA-W Graduate Co-hort, March 2009
57. CAHSI Annual Meeting, January 2009
58. BCE at SuperComputing, November 2008
59. USENIX Diversity Workshop, December 2008
60. Grace Hopper Celebration, October 2008
61. SNIA Storage Developer Conference, September 2008
62. WISE Workshop at Princeton University, 2008
63. ERBASE, April 2008
64. "Promoting the Success of Minority Graduate Students", AAAS Annual Meeting, Feb 14th 2008, Boston, MA
65. Georgia Institute of Technology, January 2008
66. University of São Paulo, Brazil, November 2007
67. SOSP's Women Workshop, October 2007
68. IEEE Vail Computer Elements Workshop, July 2007
69. 1st Brazilian Women in Technology Workshop, July 2007
70. 4th Brazilian Workshop in Operating Systems, July 2007
71. Texas A&M University, April 2007
72. University of New Mexico, December 2006
73. Latinas in Engineering', Grace Hopper Celebration of Computing, Oct 4-7 2006, San Diego, CA

74. Social and Cultural Impact of ICT on Women', Grace Hopper Celebration of Computing, October 2006
75. XXVI Congress of the Brazilian Computer society, July 2006
76. 3rd Brazilian Workshop in Operating Systems, July 2006
77. Digital Divide and Women in Developing Countries, Grace Hopper Celebration of Computing, October 2004
78. The Future of Linux on HPC Clusters, Linux Clusters, The HPC Revolution (LCI), May 2004

Personal

Citizen of the United States of America.

Citizen of Brazil.

Publications

Journal Articles

- [1] Marcio Silva, Michael R. Hines, Diego Gallo, Kyung Dong Ryu, Yoonseo Choi, Qi Liu, and Dilma Da Silva. Cloudbench: Experiment automation for cloud environments. *IEEE Transactions on Cloud Computing*, 2014. To appear.
- [2] Priyanka Tembey, Augusto Vega, Alper Buyuktosunoglu, Dilma Da Silva, and Pradip Bose. Smt switch: Software mechanisms for power shifting. *IEEE Computer Architecture Letters*, 99(RapidPosts):1, 2012.
- [3] Gordon Blair, Fabio Kon, Walfredo Cirne, Dejan Milojicic, Raghu Ramakrishnan, Dan Reed, and Dilma Silva. Perspectives on cloud computing: interviews with five leading scientists from the cloud community. *Journal of Internet Services and Applications*, 2(1):3–9, June 2011.
- [4] Jonathan Appavoo, Volkmar Uhlig, Amos Waterland, Bryan Rosenburg, Dilma da Silva, and Jose Moreira. Kittyhawk: Enabling cooperation and competition in a global, shared computational system. *IBM Journal of Research and Development*, 53(4), 2009.
- [5] Dan Tsafir, Tomer Hertz, David Wagner, and Dilma Da Silva. Portably solving file races with hardness amplification. *ACM Trans. Storage*, 4(3):1–30, 2009.
- [6] Dan Tsafir, Dilma Da Silva, and David Wagner. The murky issue of changing process identity: Revising "setuid demystified". *login: The USENIX Magazine*, 33(3):55–66, June 2008.
- [7] Maria Butrico, Dilma Da Silva, Orran Krieger, Michal Ostrowski, Bryan Rosenburg, Dan Tsafir, Eric Van Hensbergen, Robert W. Wisniewski, and Jimi Xenidis. Specialized execution environments. *SIGOPS Oper. Syst. Rev.*, 42(1):106–107, 2008.
- [8] Robert W. Wisniewski, Dilma da Silva, Marc Auslander, Orran Krieger, Michal Ostrowski, and Bryan Rosenburg. K42: lessons for the os community. *SIGOPS Oper. Syst. Rev.*, 42(1):5–12, 2008.

- [9] Jonathan Appavoo, Dilma Da Silva, Orran Krieger, Marc Auslander, Michal Ostrowski, Bryan Rosenburg, Amos Waterland, Robert W. Wisniewski, Jimi Xenidis, Michael Stumm, and Livio Soares. Experience distributing objects in an smmp os. *ACM Trans. Comput. Syst.*, 25(3):6, 2007.
- [10] Dilma Da Silva, Orran Krieger, Robert W. Wisniewski, Amos Waterland, David Tam, and Andrew Baumann. K42: an infrastructure for operating system research. *SIGOPS Oper. Syst. Rev.*, 40(2):34–42, 2006.
- [11] Jonathan Appavoo, Marc Auslander, Maria Butrico, Dilma da Silva, Orran Krieger, Mark Mergen, Michal Ostrowski, Bryan Rosenburg, Robert W. Wisniewski, and Jimi Xenidis. K42: an open-source linux-compatible scalable operating system kernel. *IBM Systems Journal*, 44(2):427–440, 2005.
- [12] Jonathan Appavoo, Kevin Hui, Craig A. N. Soules, Robert W. Wisniewski, Dilma da Silva, Orran Krieger, Marc Auslander, David Edelsohn, Ben Gamsa, Gregory R. Ganger, Paul McKenney, Michal Ostrowski, Bryan Rosenburg, Michael Stumm, and Jimi Xenidis. Enabling autonomic system software with hot-swapping. *IBM Systems Journal*, 42(1):60–76, 2003.
- [13] Dilma Menezes da Silva and Fabio Kon. Adaptive directory services for highly dynamic environments. *IEEE Distributed Systems Online*, 2(7):<http://computer.org/dsonline/0107/features/kon0107.htm>, November 2001.
- [14] D. M. Silva, K. Schwan, and G. Eisenhauer. CTK: Configurable object abstractions for multiprocessors. *IEEE Transactions on Software Engineering*, 27(6):531–550, June 2001.
- [15] Ana P. Gladcheff, Dilma M. Silva, and Vera Barros. O software educacional e a psicopedagogia no ensino de matemática direcionada ao ensino fundamental. *Brazilian Journal of Computers in Education*, pages 63–70, April 2001.
- [16] Thomas Kindler, Karsten Schwan, Dilma M. Silva, Mary Trauner, and Fred Alyea. Parallelization of spectral models for atmospheric transport processes. *Concurrency: Practice and Experience*, 8(9):639–666, November 1996.
- [17] Bodhi Mukherjee, Dilma Silva, Karsten Schwan, and Ahmed Gheith. KTK: kernel support for configurable objects and invocations. *Distributed Systems Engineering Journal*, 1:259–270, 1994. (pdf).

Chapter in Books

- [18] Lamia Youseff, Dilma Da Silva, Maria Butrico, and Jonathan Appavoo. *Cloud Computing and Software Services: Theory and Technique*, chapter Understanding the Cloud Computing Landscape, pages 1–16. CRC Press, July 2010.
- [19] Greg Eisenhauer, Weiming Gu, Thomas Kindler, Karsten Schwan, Dilma Silva, and Jeffrey Vetter. Opportunities and tools for highly interactive distributed and parallel computing. In Rebecca Koskela and Margaret Simmons, editors, *Parallel Computer Systems: Performance Instrumentation and Visualization*. ACM Press, 1996.

Refereed Conference and Workshop Articles

- [20] Lang Feng, Prabhakar Kudva, Dilma Da Silva, and Jiang Hu. Exploring serverless computing for neural network training. In *Proceedings of IEEE CLOUD*, San Francisco, CA, July 2018. Acceptance rate: 15%.
- [21] Hao He, Jiang Hu, and Dilma Da Silva. Enhancing datacenter resource management through temporal logic constraints. In *31st IEEE International Parallel and Distributed Processing Symposium (IPDPS)*, Orlando, FL, May 2017. Acceptance rate: 22%, 116/516.
- [22] Priyanka Tembey, Saumitra Das, Dilma Da Silva, and Vrajesh Bhavsar. All opportunities are not equal: Enabling energy efficient app syncs in diverse networks. In *6th Workshop on Power-aware Computing and Systems (HotPower'14)*, Broomfield, CO, October 2014. USENIX.
- [23] Xiaoen Ju, Livio Soares, Kang G. Shin, Kyung Dong Ryu, and Dilma Da Silva. On fault resilience of openstack. In *Proceedings of the 4th Annual Symposium on Cloud Computing, SOCC '13*, pages 2:1–2:16, New York, NY, USA, 2013. ACM. Acceptance rate: 20%. Pdf available at ACM DL.
- [24] Marcio Silva, Michael R. Hines, Diego Gallo, Qi Liu, Kyung Dong Ryu, and Dilma da Silva. Cloudbench: Experiment automation for cloud environments. In *Proceedings of the 2013 IEEE International Conference on Cloud Engineering, IC2E '13*, pages 302–311, Washington, DC, USA, 2013. IEEE Computer Society. Nominated for Best Paper Award. Acceptance rate: 20.5%.
- [25] Qi Liu, Marcio A. Silva, Michael R. Hines, and Dilma Da Silva. Hardware-in-the-loop simulation for automated benchmarking of cloud infrastructures. In *Proceedings of the Winter Simulation Conference, WSC '12*, pages 226:1–226:12. Winter Simulation Conference, 2012. Acceptance rate: 49%.
- [26] Qi Liu, Georgios K. Theodoropoulos, Dilma Da Silva, and Elvis S. Liu. Towards an agent-based symbiotic architecture for autonomic management of virtualized data centers. In *Proceedings of the Winter Simulation Conference, WSC '12*, pages 147:1–147:13. Winter Simulation Conference, 2012. Acceptance rate: 49%.
- [27] Rolf Riesen, Kurt Ferreira, Dilma Da Silva, Pierre Lemarinier, Dorian Arnold, and Patrick G. Bridges. Alleviating scalability issues of checkpointing protocols. In *Proceedings of the International Conference on High Performance Computing, Networking, Storage and Analysis, SC '12*, pages 18:1–18:11, Los Alamitos, CA, USA, 2012. IEEE Computer Society Press. Acceptance rate: 21%.
- [28] Liting Hu, Kyung Dong Ryu, Dilma Da Silva, and Karsten Schwan. v-bundle: Flexible group resource offerings in clouds. In *32nd International Conference on Distributed Computing Systems*, pages 406–415. IEEE Computer Society, June 2012. Acceptance rate: 13%.
- [29] Yoonseo Choi, Cheng-Hong Li, Dilma Da Silva, Alan Bivens, and Eugen Schenfeld. Adaptive task duplication using on-line bottleneck detection for streaming applications. In *Proceedings of the 9th Conference on Computing Frontiers, CF '12*, pages 163–172, New York, NY, USA, May 2012. ACM. Acceptance rate: 42%.

- [30] Abhirup Chakraborty, Eugen Schenfeld, and Dilma Da Silva. Switching optically-connected memories in a large-scale system. In *26th IEEE International Parallel and Distributed Processing Symposium (IPDPS)*, pages 727–738, Shangai, China, May 2012. IEEE Computer Society. Acceptance rate: 20.8%.
- [31] Marcio Silva, Kyung Dong Ryu, and Dilma Da Silva. VM performance isolation to support QoS in cloud. In *Eighth International Workshop on System Management Techniques, Processes, and Services (SMTPS), co-located with IPDPS*, pages 1–8, Los Alamitos, CA, USA, May 2012. IEEE Computer Society.
- [32] Michael R. Hines, Abel Gordon, Marcio Silva, Dilma da Silva, Kyung Dong Ryu, and Muli Ben-Yehuda. Applications know best: Performance-driven memory overcommit with ginkgo. In *Proceedings of 3rd IEEE International Conference on Cloud Computing Technology and Science (IEEE CloudCom 2011)*, pages 130–137, November 2011. Acceptance rate: 18%.
- [33] Abel Gordon, Michael R. Hines, Dilma da Silva, Muli Ben-Yehuda, Marcio Silva, and Gabriel Lizarraga. Ginkgo: Automated, Application-Driven Memory Overcommitment for Cloud Computing. In *RESOLVE: Runtime Environments/Systems, Layering, and Virtualized Environments Workshop (co-located with ASPLOS)*, Newport Beach, CA, March 2011. ACM.
- [34] Xabriel Collazo-Mojica, Fabio Kon, Dilma da Silva, and S. Masoud Sadjadi. Virtual environments: Easy modeling of interdependent virtual appliances in the cloud. In *Proc. of SPLASH 2010 Workshop on Flexible Modeling Tools*, 2010.
- [35] Glenn Ammons, Vasanth Bala, Stefan Berger, Dilma Da Silva, Jim Doran, Frank Franco, Alexei Karve, Herb Lee, James A. Lindeman, Ajay Mohindra, Bob Oesterlin, Giovanni Pacificiand Dimitrios Pendarakis, Darrell Reimer, Kyung Ryu, and Xiao Mariusz Sabath. RC2: a living lab for cloud computing. In *Proc. 24th Large Installation System Administration Conference (LISA '2010)*, San Jose, November 2010. USENIX. Acceptance rate: 43%.
- [36] Sukhyun Song, Kyung Dong Ryu, and Dilma Da Silva. Blue eyes: Scalable and reliable system management for cloud computing. In *Fifth International Workshop on System Management Techniques, Processes, and Services (SMTPS), co-located with IPDPS*, pages 1–8, Los Alamitos, CA, USA, 2009. IEEE Computer Society.
- [37] Lamia Youseff, Maria Butrico, and Dilma Da Silva. Towards a unified ontology of cloud computing. In *In proceeding of IEEE Grid Computing Environments (GCE08) workshop*, November 2008. Co-located with SuperComputing'08. Available at <http://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=4738437&isYear=2008>.
- [38] Dan Tsafir, Tomer Hertz, David Wagner, and Dilma Da Silva. Portably solving file TOCT-TOU races with hardness amplification. In *Proc. of Usenix File and Storage Technologies (FAST)*, pages 189–206, San Jose, CA, February 2008. USENIX. Best Paper Award.
- [39] Jonathan Appavoo, Volkmar Uhlig, and Dilma Da Silva. Scalability: The software problem. In *Proc. of 2nd Workshop on Software Tools for Multi-core Systems*, San Jose, CA, March 2007.

- [40] José E. Moreira, Maged M. Michael, Dilma Da Silva, Doron Shiloach, Parijat Dube, and Li Zhang. Scalability of the nutch search engine. In *Proceedings of the 21st Annual International Conference on Supercomputing, ICS '07*, pages 3–12, New York, NY, USA, 2007. ACM. Acceptance rate: 23%.
- [41] Daniel Cordeiro, Alfredo Goldman, and Dilma Da Silva. Load balancing on an interactive multiplayer game server. In *Proc. of Euro-Par*, pages 184–194, Rennes, France, August 2007. Acceptance rate: 26.7%.
- [42] Andrew Baumann, Jonathan Appavoo, Robert W. Wisniewski, Dilma M. Da Silva, Orran Y. Krieger, and Gernot Hesier. Reboots are for hardware: Updating an operating system on the fly. In *Proc of USENIX Annual Technical Conference*, San Jose, CA, June 2007. USENIX. Acceptance rate: 23.8%.
- [43] Glenn Ammons, Jonathan Appavoo, Maria A. Butrico, Dilma Da Silva, David Grove, Orran Krieger, Kiyokuni Kawachiya, Bryan S. Rosenburg, Eric Van Hensbergen, and Robert W. Wisniewski. Libra: A library operating system for a jvm in a virtualized execution environment. In *Proc. of Virtual Execution Environments (VEE)*, pages 44–54, San Diego, CA, June 2007. ACM. Acceptance rate: 27%.
- [44] Suparna Battacharya and Dilma da Silva. Towards a highly adaptable filesystem framework for linux. In *Proc of the Ottawa Linux Symposium*, volume 1, pages 87–100, Ottawa, Canada, July 2006.
- [45] Orran Krieger, Marc Auslander, Bryan Rosenburg, Robert W. Wisniewski, Jimi Xenidis, Dilma Da Silva, Michal Ostrowski, Jonathan Appavoo, Maria Butrico, Mark Mergen, Amos Waterland, and Volkmar Uhlig. K42: Building a complete system. In *EuroSys 2006*, pages 143–156, Leuven, Belgium, April 18-21 2006. ACM. Acceptance rate: 22.1%.
- [46] Andrew Baumann, Jeremy Kerr, Jonathan Appavoo, Dilma da Silva, and Robert W. Wisniewski. Module hot-swapping for dynamic update and reconfiguration in k42. In *Proc. of the Linux.conf.au*, Canberra, Australia, April 2005.
- [47] Andrew Baumann, Jonathan Appavoo, Dilma da Silva, Jeremy Kerr, Orran Krieger, and Robert W. Wisniewski. Providing dynamic update in an operating system. In *Proc. of USENIX*, pages 279–291, Anaheim, CA, April 2005.
- [48] Andrew Baumann, Jonathan Appavoo, Dilma da Silva, Orran Krieger, and Robert W. Wisniewski. Improving operating system availability with dynamic update. In *OASIS - Workshop of Operating System and Architectural Support for the deman IT Ifrastructure*, pages 21–27, Boston Massachusetts, October 2004.
- [49] Dilma da Silva, Livio Soares, and Orran Krieger. KFS: Exploring flexibility in file system design. In *Proc. of the Brazilian Workshop in Operating Systems*, Salvador, Brazil, August 2004.
- [50] Livio Soares, Orran Krieger, and Dilma Da Silva. Meta-data snapshotting: A simple mechanism for file system consistency. In *SNAPI'03 (International Workshop on Storage Network Architecture and Parallel I/O)*, pages 41–52, 2003.
- [51] Jonathan Appavoo, Marc Auslander, David Edelsohn, Dilma da Silva, Orran Krieger, Michal Ostrowski, Bryan Rosenburg, Robert W. Wisniewski, and Jimi Xenidis. Providing a Linux API on the scalable K42 kernel. In *Freenix*, pages 323–336, San Antonio, TX, June 9-14 2003.

- [52] Rodrigo S. de Castro, Alair P. Lago, and Dilma M. da Silva. Adaptive compressed caching: Design and implementation. In *15th Symposium on Computer Architecture and High Performance Computing*, Sao Paulo, Brazil, November 2003. Acceptance rate: 30%.
- [53] Craig A. N. Soules, Jonathan Appavoo, Kevin Hui, Robert W. Wisniewski, Dilma da Silva, Gregory R. Ganger, Orran Krieger, Michael Stumm, Marc Auslander, Michal Ostrowski, Bryan Rosenburg, and Jimi Xenidis. System support for online reconfiguration. In *USENIX*, pages 141–154, San Antonio, TX, June 9-14 2003.
- [54] Jonathan Appavoo, Kevin Hui, Michael Stumm, Robert Wisniewski, Dilma da Silva, Orran Krieger, and Craig Soules. An infrastructure for multiprocessor run-time adaptation. In *WOSS - Workshop on Self-Healing Systems*, 2002.
- [55] Dilma M. Silva, Fabio Kon, and Roy Campbell. Dynamic Configuration of a Directory Service Using the ComponentConfigurator Framework. Proceedings of the Project SIDAM Workshop, September 2000.
- [56] Uira Kulesza and Dilma M. Silva. Reengenharia do Projeto do Servidor WEB JAWS utilizando Programação Orientada a Aspectos. In *Proc. Simp. Bras. Engenharia de Software (SBES)*, October 2000.
- [57] Ana P. Gladcheff, Dilma M. Silva, and Edna Zuffi. Um instrumento para avaliação da qualidade de softwares educacionais de matemática para o ensino fundamental. In *Proc. VIE Workshop in Informatics at School*, Fortaleza, Brazil, 2001.
- [58] Marcus Endler, Dilma M. Silva, Francisco Silva, Ricardo Rocha, and Marcos Moura. Project SIDAM: Overview and preliminary results. In *Proceedings of the II Brazilian Workshop in Wireless Computing (part of the Brazilian Symposium on Networking)*, June 2000.
- [59] Uira Kulesza and Dilma M. Silva. Reengineering of the JAWS web server design using Aspect Oriented Programming. In *Proceedings of the Workshop of Aspects and Dimension of Concerns (part of ECOOP)*, June 2000.
- [60] Ana Paula Gladcheff, Dilma M. Silva, and Jose C. Maldonado. Instrumento de avaliação de qualidade para software de ensino. In *Proc of Workshop in Software Engineering Dissertations*, pages 18–22, Florianopolis, Brazil, 1999.
- [61] Jorge E. Vieira and Dilma M. Silva. The SMART scheduling for Linux. In *Proc. of the Workshop in Real Time Linux*, Dec 1999.
- [62] Markus Endler, Dilma M. Silva, and Kunio Okuda. A reliable connectionless protocol for mobile clients. In *Proc. of the Communication Networks And Distributed Systems Modeling And Simulation Conference*, January 2000.
- [63] Markus Endler, Dilma M. Silva, and Kunio Okuda. A result delivery protocol for mobile computing. In *Proc. Workshop on Wireless Networks and Mobile Computing (WNMC), ICDCS'2000*. IEEE, April 2000.
- [64] Dilma Menezes da Silva. Introdução à programação concorrente para a internet. In *JAI (Jornada de Atualização em Informática)*, pages 209–262. SBC, 1999.

- [65] Carlos E. Ferreira and Dilma M. Silva. BCC da USP: um novo curso para os desafios do novo milênio. In *Proc. of VII Workshop de in Computer Education (WEI), SBC*, pages 505–514, Rio de Janeiro, july 1999.
- [66] Jorge Euler, Maria do Carmo Noronha, and Dilma M. Silva. Estudo de caso: Desempenho do sistema operacional linux para aplicações multimídia em tempo real. In *Proc. II Workshop de Tempo Real, SBRC*, pages 88–95, Belo Horizonte, 1999.
- [67] Jya-Jang Tsai and Dilma M. Silva. Aggregated cells in a java-based distributed ATM simulator. In *Proc. of the SCS International Conference On Web-Based Modelling and Simulation*, San Francisco, USA, January 1999.
- [68] Dilma Menezes da Silva, Marco Dimas Gubitoso, and Markus Endler. Sistemas de informação distribuídos para agentes móveis. In *Proceedings of the XXV Brazilian Software and Hardware Seminars (SEMISH'98)*, pages 125–140, Belo Horizonte, Brazil, August 1998. SBC. Available in <http://www.ime.usp.br/~dilma/papers/semish98.ps>.
- [69] Dilma M. Silva, Karsten Schwan, and Greg Eisenhauer. Configurable distributed retrieval of scientific data. In *Proc. 4th International Conference on Configurable Distributed Systems (ICCDs'98)*, pages 120–127, Annapolis, USA, May 1998. IEEE Computer Society. Also available in www.ime.usp.br/~dilma/papers/.
- [70] Dilma Menezes da Silva and Karsten Schwan. A framework for developing high performance configurable objects. In *Proceedings of the XI Brazilian Symposium on Software Engineering (SBES'97)*, pages 165–180, Fortaleza, Brazil, October 1997.
- [71] Dilma Menezes da Silva and Karsten Schwan. Achieving high performance through flexible software. In *Proceedings of the XXIV Brazilian Software and Hardware Seminars (SEMISH'97)*, pages 265–276, Brasília, Brazil, August 1997. Available in <http://www.ime.usp.br/~dilma/papers/semish97.ps>.
- [72] Greg Eisenhauer, Weiming Gu, Thomas Kindler, Karsten Schwan, Dilma Silva, and Jeffrey Vetter. Opportunities and tools for highly interactive distributed and parallel computing. In *Proceedings of The Workshop On Debugging and Tuning for Parallel Computing Systems*, 1994. Also available as technical report GIT-CC-94-58.
- [73] Ahmed Gheith, Bodhi Mukherjee, Dilma Silva, and Karsten Schwan. KTK: Kernel support for configurable objects and invocations. In *Proc. of the Second International Workshop in Configurable Distributed Systems*, pages 92–104. IEEE Computer Society Press, may 1994.
- [74] Ahmed Gheith, Bodhi Mukherjee, Dilma Silva, and Karsten Schwan. KTK: Configurable objects and invocations. In *Proc. of the International Workshop in object oriented operating systems*, pages 236–240, december 1993. (pdf).

Other Publications

- [75] Chih peng Wu, Mahima Agumbe Suresh, and Dilma Da Silva. Container lifecycle management in edge nodes. Poster at SEC (ACM/IEEE Conference on Edge Computing), October 2017.
- [76] Abhirup Chakraborty and Dilma Da Silva. Research Issues in Supporting Data Intensive Applications within an Exascale System. Technical Report RC25302 (WAT1208-65), IBM Research, Yorktown Heights, NY, August 2012.

- [77] N. Burke, T. Chao, J. Chen, C.-H. Chen-Ritzo, C. A. Chess, S. Chiras, D. Da Silva, E. Duch, E. Duesterwald, M. Eleftheriou, M. E. Helander, H. Hunter, C. Lasser, S. Mahatma, I. Nnebe, K. Penchuk, A. Sailer, V. Salapura, L. Sekaric, J. L. Snowdon, M. L. Steen, A. Topol, C. K. Tsang, and M. Zhou. Watson women’s network leadership: A best practice at IBM Research for innovative and effective recruitment and retention. In *Proceedings of 2008 WEPAN (Women in Engineering ProActive Network) National Conference*, St Louis, Missouri, June 2008.
- [78] Dilma M da Silva. Mulheres em computação (Women in computing). Computação Brasil, March 2006. SBC (Brazilian Computer Society).
- [79] Jonathan Appavoo, Marc Auslander, Dilma Da Silva, Orran Krieger, Michal Ostrowski, Bryan Rosenburg, Robert W. Wisniewski, Jimi Xenidis, Michael Stumm, Ben Gamsa, Reza Azimi, Raymond Fingas, Adrian Tam, and David Tam. Enabling scalable performance for general purpose workloads on shared memory multiprocessors. Technical Report RC22863, IBM Research, 2003.
- [80] Markus Endler, Dilma M. Silva, and Kunio Okuda. A reliable connectionless protocol for mobile clients. Technical Report RT-MAC-9911, IME-USP, setembro 1999.
- [81] Carlos E. Ferreira and Dilma M. Silva. BCC da USP: um novo curso para os desafios do novo milênio. Technical Report RT-MAC-9902, IME-USP, 1999.
- [82] Jorge Euler Vieira, Maria do Carmo Noronha, and Dilma Menezes da Silva. Estudo de caso: Desempenho deficiente do sistema operacional LINUX para carga mista de aplicações. Technical Report RT-MAC-9904, IME-USP, 1999.
- [83] Dilma M. Silva. COBS-OM performance evaluation. <http://www.ime.usp.br/~dilma/-DataObject/>, March 1998.
- [84] Dilma M. Silva and Markus Endler. Configuração dinâmica de sistemas. Technical Report RT-MAC-9707, Instituto de Matemática e Estatística, Universidade de São Paulo, 1997.
- [85] Dilma Menezes da Silva and Karsten Schwan. CTK: configurable object abstractions for multiprocessors. Technical Report GIT-CC-97-03, Georgia Institute of Technology, Atlanta, GA 30332, January 1997.
- [86] Dilma M. Silva. Programação por objetos: conceitos, linguagens e uma experiência. Master’s thesis, Instituto de Matemática e Estatística da Universidade de São Paulo, september 1990.

Patents (Partial List)

1. Dynamic Virtual Machine Resizing in a Cloud Computing Infrastructure
 Authors: David Breitgand, Dilma Da Silva, Amir Epstein, Alexander Glikson, Michael Hines, Kyung Ryu, Marcio Silva
 US Application YOR920120468US2
 Status: Filed in November 2012
2. Method and System for Power Shifting in Multicore Platforms by varying SMT Levels”
 Authors: Pradip Bose, Alper Buyuktosunoglu, Dilma M. Da Silva, Hubertus Franke, Priyanka Tembey
 US Application YOR920120278US1
 Status; Filed in May 2012

3. Identification of Over-Constrained Virtual Machines
Authors: Eli Dow and Dilma da Silva
US Application US 13/163046
Status: Filed in June 2011
4. Virtual Machine Load Balancing
Authors: Eli Dow and Dilma da Silva
US Patent 8,966,084
Status: Issued in February 2015
5. Virtual Machine Load Balancing
Authors: Eli Dow and Dilma da Silva
US Application US 13/163061
Status: Filed in June 2011
6. Dynamic Memory Management in a Virtualized Computing Environment
Authors: Muli Ben-Yehuda, Dilma da Silva, Abel Gordon, Michael Hines
Status: Filed in January 2011
7. US 7,818,736 B2
Dynamic Update Mechanisms in Operating Systems
Authors: Jonathan Appavoo, Dilma da Silva, Orran Krieger, Robert Wisniewski, Andrew Baumann
Status: granted on Oct 19th, 2010
8. US 7,533,377 B2
Achieving Autonomic Behavior in Operating System via a Hot-Swapping Mechanisms
Inventors: Jonathan Appavoo, Marc Auslander, Kevin Hui, Orran Krieger, Dilma da Silva, Bob Wisniewski
Status: granted on May 12th, 2009
9. US 7,437,517 B2
Methods and Arrangements to Manage On-Chip Memory to Reduce Memory Latency
Inventors: Dilma da Silva, Elmootazbellah Elnozahy, Orran Krieger, Hazim Shafi, Xiaowei Shen, Balaram Sinharoy, Robert Brett Tremaine
Status: granted on Oct 14th, 2008
10. Memory in Processor (MIP) Morph and Operating System Support
Authors: Hazim Shafi, Orran Krieger, Dilma da Silva, Mootaz Elnozahy, Balaram Sinharoy, Xiaowei Shen, Robert Tremaine
Filed in November 2004
11. Enhancement of Real-time Operating System Functionality Using a Hypervisor
Authors: Marc Auslander, B Betzler, Dilma Da Silva, Mike N Day, Orran Krieger, Paul McKenney, Michal Ostrowski, Bryan Rosenburg, Robert Wisniewski, Jimi Xenidis
Filed in May 2004