CURRICULUM VITAE ET STUDIORUM
Danilo Ardagna

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Born: June 8, 1973—Monza (MB), Italy

Nationality: Italian

highlights

80+ peer-reviewed publications, including **24 top-ranked journal** papers, and **7 IEEE Trans.**

Co-author of **49** scientific publications on **peer-reviewed conferences/workshops**

Co-author of **5 chapters** in **scientific books**

Co-author of **two textbooks** in Italian

Co-editor of **one scientific book**

Co-inventor of **two international patents (one already granted)**

13 Invited Talks/Seminars/Panels (2007-2015)

Visiting researcher and intern at **IBM T.J. Watson Research**, **BCAM (Basque Center for Applied Mathematics)**, and **Federal University of Minas Gerais**, Brazil

Co-applicant for several **European and national funded projects**, totaling **1.5mln euros** of funding to date

IBM 2010 faculty award for research on virtualized systems

Amazon AWS in Education research grant **May 2014**, **March 2012,** and **December 2010**. Joint work with Elisabetta Di Nitto and Gianpaolo Cugola

Windows Azure Research Pass October 2013. Joint work with Elisabetta Di Nitto

Politecnico di Milano Fondi **5 per mille 2013 Poli-RISPOSTA project co-applicant**, and **2009 GAME-IT Principal Investigator**

Based on Google Scholar (27/12/2014), my **h-index** is **22** and total number of citations is 2367, with first published paper in 2002. My top ranked paper was published in 2007 collecting up to 647 citations

POLITECNICO DI MILANO, MILAN, ITALY

Dec 2014 -   Associate Professor at the Department of Electronics, Information, and Bioengineering

2006-2014   Assistant Professor (tenure-track) at the Department of Electronics, Information, and Bioengineering

2004-2006   Post Doctorate at the Department of Electronics, Information, and Bioengineering. Grant by MIUR to support post-doctoral studies

2001-2004   Ph.D. Student. Grant by Politecnico di Milano to support Ph.D. studies

2001-2004   Politecnico di Milano, Ph.D. in Computer Engineering with the thesis "A cost-oriented methodology for the design of information technology architectures," advisor Prof. C. Francalanci

1992-2000   Politecnico di Milano, Master in Computer Engineering (100/100 magna cum laude), with the thesis "ISIDE: A software tool for the cost-oriented design of Information Systems," advisor   Prof. G. Bracchi

AREAS OF SPECIALIZATION

Design, prototype, and evaluation of self-management algorithms for Service based and Cloud systems. Optimization algorithms and game theory application to resource management of very large-scale data centers. Model Driven Design and management of multi-Cloud applications. Energy efficiency solutions for virtualized infrastructures. Cost oriented design and capacity planning of distributed IT architectures.

MICROSOFT CLOUD SERVICES

• Windows Azure Research Pass October 2013. Joint work with Elisabetta Di Nitto, DEEP-SE Cloud initiative (40k$)

AMAZON WEB SERVICES

• AWS in Education research grant March 2014. Joint work with Elisabetta Di Nitto, DEEP-SE Cloud initiative (5k$)
• AWS in Education research grant March 2012. Joint work with Elisabetta Di Nitto and Gianpaolo Cugola, DEEP-SE Cloud initiative (10k$)
• AWS in Education research grant December 2010. Joint work with Elisabetta Di Nitto, DEEP-SE Cloud initiative (10k$)

IBM

IBM Faculty Award 2010. The PARVIS project has been founded by IBM to develop self-managing techniques for virtualized systems (20k$)

POLITECNICO DI MILANO

- Fondi 5 per mille 2013. Poli-RISPOSTA project co-applicant (Principal Investigator Prof. F. Ballio). Poli-RISPOSTA is one of the 8 projects selected out of 50 proposals by Politecnico di Milano to foster research on society. The project will develop an emergency management system for hydro-geological disasters (65k€)
- Fondi 5 per mille 2009. GAME-IT project **Principal Investigator**. GAME-IT is one of the 8 projects selected out of 77 proposals by Politecnico di Milano to support junior researchers. The project aims at the development of green policies for virtualized data centers (60k€)

research interests

BIG DATA APPLICATIONS

- Model-driven-development of Data-Intensive Applications: methodology and tools for data-aware quality-driven development, optimization, and continuous monitoring of Big Data applications

GREEN AND CLOUD COMPUTING

- Model-driven-development of Cloud Applications: MDE approach for design and runtime management of applications targeting multiple Clouds with Quality of Service guarantees
- Service Provisioning: Definition of capacity allocation and load redirect policies with response time and availability constraints in Infrastructure as a Service Systems through optimization and game theory
- Energy Aware Resource Allocation: Development of autonomic resource allocation techniques for the resource management of very large scale virtualized Data Centers

SERVICE ORIENTED ARCHITECTURES

- Model-driven-development of SOAs: Model driven development of component-based systems in SOA and pervasive environments
- Web Service Composition: Definition and analysis of service selection policies in composed Flexible Processes with Quality of Service global constraints

AUTONOMIC COMPUTING

- Self Management Techniques: Design of network controllers for Autonomic Computing Infrastructures. Implementation of resource allocation policies for the optimization of Service Providers' profits associated with multiple class of Service Level Agreement acting at multiple time scales

DESIGN OF IT ARCHITECTURES

- Cost comparison of IT architectures: Empirical analysis of the technical and management costs of different IT architectures. Implementation of a design tool to support minimum-cost IT architectural design (including joint hardware and network communication costs)

International scientific

collaboration   **VISITING RESEARCHER**

2013   Two week visit at IBM T.J. Watson Research Centre. Participating to research projects on management of Map-reduce Cloud data centers and analysis of clock drifts and synchronization algorithms for multi-Cloud systems, within the Infrastructures Performance Analysis and System Optimization Group

2011   One month visit at BCAM (Basque Center for Applied Mathematics) working within the Analysis, Design and Performance Evaluation of Telecommunication Networks and Computer Systems group on the study of Generalized Nash Equilibria for Platform-as-a-Service Cloud Systems

2007   Two week visit at IBM T.J. Watson Research Centre. Participating in a research project on the self-optimization of Autonomic Computing within the Infrastructures Performance Analysis and System Optimization Group

2005   One week visit at Computer Science Department at the Federal University of Minas Gerais, Brazil. Participating in a research project on the management of services and Service Level Agreements in the Service Oriented Architecture, within the Performance Analysis and Modelling group led by Prof. Virgilio Almeida

          INTERNSHIP AT IBM T.J. WATSON RESEARCH CENTER

2003   Six month internship at IBM T. J. Watson Research Center, Performance Analysis and System Optimization Group. Participated in a research project on maximization of Service Level Agreement revenues in Web Systems. Grant by IBM Research to support studies

participation in

research projects   **EUROPEAN RESEARCH PROJECT**

2015-   **Coordinator for Politecnico di Milano research unit** for the DICE H2020 project on model driven design, quality assessment, and optimization of Data-Intensive applications

2012-   Currently participating in MODAClouds IP research project at Politecnico di Milano on design and run-time management of applications targeting multiple Clouds. **Leader of the WP** developing design-time exploration with performance and availability guarantees

2008-2013   Participation in SMScom IDEAS-ERC research project at Politecnico di Milano on design of situational application with run-time performance guarantees

2008-2012   Participation in s-Cube, the European Network of Excellence in Software Services and Systems developing optimization algorithms for composed Web services

2008-2011   Participation in Q-ImPrESS FET/STREP research project at Politecnico di Milano on the model-driven-development of SOA systems with QoS guarantees

2005-2008	Participation in WS-Diamond FET/STREP research project at Politecnico di Milano on the design of repair actions in self-healing web services systems

ITALIAN NATIONAL RESEARCH PROJECT

2005-2008	Participation in DISCORSO FAR research project at Politecnico di Milano on the design of optimization and Web services composition algorithms to support Small and Medium Enterprises and industrial districts
2003-2005	Participation in MAIS FIRB research project at Politecnico di Milano on analysis of multi-channel adaptive Information Systems

IBM ITALY RESEARCH PROJECT

2006	Participation in WASFO (Workload Analysis for Server Farm Optimization) project at Politecnico di Milano on the development of a software tool for the capacity planning of autonomic virtualized server farms

service activities

INTERNATIONAL CONFERENCE TECHNICAL PROGRAM

COMMITTEE MEMBER (main)

- OBD 2015
- IEEE ICAC 2015, 2014
- IFIP DAIS 2014
- Closer 2015, 2014, 2013
- IEEE BDDS 2013
- IEEE MASCOTS 2013, 2014
- IEEE CGC 2013
- IEEE HPCC 2013
- IEEE CLOUD-II 2015, 2014, 2013, 2012, 2011, 2010, 2009
- IEEE ICWS 2012, 2011, 2010, 2009
- IEEE Big Data 2014
- IEEE ICDCS 2012
- IEEE ICPADS 2012
- QoSA 2011, 2010, 2009
- FiCloud 2014
- CSC 2012
- MobiWIS 2011
- CGC 2011
- SEASS 2011
- Intensive 2009
- IEEE/INFORMS SOLI 2009
- IESA 2007, 2006

CONFERENCE ORGANIZATION COMMITTEES

- ICGreen 2015 General chair, Milan, Italy
- BPM 2008 Local organization chair, Milan, Italy

EDITORIAL BOARDS

- 2015 Guest co-Editor, Springer Computing, Sustainable Computing Systems and Applications special issue
- 2014 Guest co-Editor, ACM SIGMETRICS Performance Evaluation Review, Performance and Resource Management in Big Data Applications special issue
- 2013 Guest co-Editor, Springer Computing, Cloud Computing special issue
- Since 2012, Editorial Board Member, International Journal of Cloud-Computing and Super-Computing

INTERNATIONAL WORKSHOPS CO-ORGANIZER AND CO-CHAIR

- First International Workshop on Multi-Cloud applications and federated clouds (Multi-Cloud) 2013, at ICPE 2013
- First International Workshop on Run-time mOdels for Self-managing Systems and Applications (ROSSA) 2009, at Valuetools 2009
- First International workshop on Quality of Self-healing Web Services (QSWS) 2008, at BPM 2008

INTERNATIONAL JOURNALS REVIEWING SERVICES (main)

- IEEE Transactions on Software Engineering
- IEEE Transactions on Services Computing
- IEEE Transactions on Computers
- IEEE Transactions on Cloud Computing
- IEEE Systems Journal
- ACM Transactions on the Web
- ACM Transactions on Autonomous and Adaptive Systems
- IEEE Internet Computing
- IEEE Transactions on System Men and Cybernetics, Part C
- Journal of Systems and Software, Elsevier
- Journal of Parallel and Distributed Computing, Elsevier
- European Journal of Operational Research, Elsevier
- Journal on Selected Areas in Communications
- Computers in Industry, Elsevier
- Information and Software Technology, Elsevier
- Journal of Cooperative Information Systems
- Journal of Information Technology, Kluwer

EVALUATION OF EUROPEAN AND NATIONAL RESEARCH PROJECTS

- Member of the Netherlands Organisation for Scientific Research Executive Board, 2013
- Member of the Austrian Science Fund Executive Board, 2012, 2013

ROLES WITHIN IEEE COMPUTER SOCIETY

- Since May 2014, General Chair of the IEEE Special Technical Community on Sustainable Computing
- 2013-2014, Secretary/Treasurer of the IEEE Special Technical Community on Sustainable Computing

- 2011-2103, Information Officer of the IEEE Special Technical Community on Sustainable Computing

ROLES WITHIN AICA (Italian Association for Automated Computing), ITALY

Since 2011 member of the IT Systems Architect working group

INVITED SEMINARS

- Model Driven Development and QoS Assessment of Cloud Applications, Polytechnic University of Catalonia, Barcelona, Spain, 7/5/2014
- Model Driven Development and QoS Assessment of Cloud Applications, IBM T.J. Watson Research Center, Yorktown Heights, NY, USA, 15/10/2013
- QoS Modeling and Evaluation in Cloud Environments, University of Austria at Timisoara, Timisoara, Romania, 24/9/2013
- QoS Modeling and Evaluation in Cloud Environments, 7th Advanced Summer School in Service Oriented Computing, Crete, Greece, 4/7/2013
- Generalized Nash Equilibria for the Service Provisioning Problem in Cloud Systems, IRISA, Rennes, France, 8/11/2012
- Energy-Aware Autonomic Resource Allocation in Multitier Virtualized Environment (in very Large Service Centers), Imperial College, London, UK, 1/6/2012
- A Game Theoretic Formulation of the Service Provisioning Problem in Cloud Systems, IBM T.J. Watson Research Center, Hawthorne, NY, USA, 1/7/2011
- A Game Theoretic Formulation of the Service Provisioning Problem in Cloud Systems, BCAM, Bilbao, Spain, 27/5/2011
- Identification of Linear Parameter Varying State Space Models for the Performance Management of Autonomic Systems, IBM T.J. Watson Research Center, Hawthorne, NY, USA, 23/7/2009
- Green Active Management of Energy in IT systems, Karlsruhe University, Karlsruhe, Germany, 29/4/2009
- Active Management of Energy in IT systems, Italy, Università di Modena e Reggio Emilia, Modena, Italy, 24/10/2008
- Adaptive Service Composition in Flexible Processes, IBM T.J. Watson Research Center, Hawthorne, NY, USA, 4/5/2007
- Capacity Management and Planning for Modern Virtualized IT Infrastructures, IBM T.J. Watson Research Center, Hawthorne, NY, USA, 30/4/2007

TUTORIALS

- Model-Driven Management of Multi-Cloud Applications, UCC 2014. London, UK, 11/12/2014. Joint tutorial with Giuliano Casale and Nicolas Ferry
- Model Driven Design of Cloud Applications with a-priori Quality of Service Guarantees . SYNASC MICAS 2014. Timisoara, Romania, 22-23/9/2014. Joint tutorial with Marcos Almeida, Nicolas Ferry, and Juan F. Perez
- Model Driven Design of Cloud Applications with a-priori Quality of Service Guarantees. ASE 2014. Västerås, Sweden, 16/9/2014. Joint tutorial with Marcos Almeida, Giuliano Casale, and Nicolas Ferry

teaching

experience

2001-2015   **UNDERGRADUATE TEACHING**

- 2006-2015, Principles of Computer Systems, Politecnico di Milano
- 2008-11, Computer Science Project, Politecnico di Milano
- 2003-04, Web based Information Systems, Politecnico di Milano
- 2003-2008: Information Systems Platforms, Politecnico di Milano

GRADUATE TEACHING

- 2012-15, Multi-disciplinary Project, Politecnico di Milano
- 2011-12; 2013-14, Cloud Computing from a Software Engineering perspective, Master and PhD program Politecnico di Milano
- 2007-08: Autonomic Services, PhD course Politecnico di Milano
- 2013-2014: Graduate seminars on Software Engineering, Politecnico di Milano
- 2001-2006: Graduate seminars on Information System platforms and security, Politecnico di Milano

RESEARCH SUPERVISION

- 2012- Present: Postdoctoral research advisor for Dr. Michele Ciavotta
- 2009-2010: Postdoctoral research advisor for Dr. Barbara Stefania Panicucci
- 2013- Present: Supervisor for PhD. Student Giovanni Paolo Gibilisco
- 2010-2012: Co-Supervisor for PhD. Student Niccolò Maria Calcavecchia
- 2013: Supervisor of the Minor research for PhD. Student Santo Lombardo
- 2012: Supervisor of the Minor research for PhD. Student Silvia Lovergine
- 2010: Supervisor of the Minor research for PhD. Student Chiara Sandionigi

PHD EXAMINER

- Nicolas Poggi M. PhD Evaluation commission, Polytechnic University of Catalonia, 2014
- Ajay Kattepur PhD Evaluation commission, INRIA-IRISA, 2012

patents

D. Ardagna, E. Conforti, C. Francalanci , M. Gatti, S. Lucchini, S. Morsello, M. Trubian. Method, system and computer program for configuring server farms at minimum cost. Politecnico di Milano - IBM. *Patent number US7886036*, USA Patent Office. *Patent pending EP06123004*, European Patent Office.

Full List of Publications

Editorial Work

1. *D. Ardagna*, L. Schubert. Springer Computing. Special Issue on Cloud Computing. Springer 2015.
2. *D. Ardagna*, L. Schubert. Proceedings of the 2013 international workshop on Multi-cloud applications and federated clouds. ACM DL 2013.
3. *D. Ardagna*, L. Zhang. Run-time Models for Self-managing Systems and Applications. Springer Autonomic Computing Series 2010.
4. *D. Ardagna*, M. Mecella, J. Yang. Business Process Management Workshops, BPM 2008 International Workshops, Milano, Italy, September 1-4, 2008. Revised Papers. Lecture Notes in Business Information Processing 17, Springer 2009.

International Journals

5. *D. Ardagna*, G. Casale, M. Ciavotta, J. F. Perez, W. Wang. Quality-of-Service in Cloud Computing: Modeling Techniques and Their Applications. Journal of Internet Services and Applications. 5(1), 1-17, 2014.
6. B. Addis, *D. Ardagna*, A. Capone, G. Carello. Energy-aware Joint Management of Networks and Cloud Infrastructures. Computer Networks. 70, 75-95, 2014.
7. J. Anselmi, *D. Ardagna*, M. Passacantando. Generalized Nash Equilibria for SaaS/PaaS Clouds. European Journal of Operational Research. 236(1), 326-339, 2014.
8. J. Anselmi, *D. Ardagna*, J. C. S. Lui, Adam Wierman, Y. Xu, Z. Yang. The economics of the cloud: price competition and congestion. SIGMETRICS Performance Evaluation Review. 41(4), 47-49, 2014.
9. J. Anselmi, *D. Ardagna*, J. C. S. Lui, Adam Wierman, Y. Xu, Z. Yang. The economics of the cloud: price competition and congestion. SIGecom Exchanges 13(1): 58-63, 2014.
10. C. Sandionigi, *D. Ardagna*, G. Cugola, C. Ghezzi. Optimizing Service Selection and Allocation in Situational Computing Applications. IEEE Transactions on Services Computing. 6(3), 414-428, 2013.
11. *D. Ardagna*, B. Panicucci, M. Passacantando. Generalized Nash Equilibria for the Service Provisioning Problem in Cloud Systems. IEEE Transactions on Services Computing. 6(4), 429-442, 2013.
12. B. Addis, *D. Ardagna*, B. Panicucci, M. Squillante, L. Zhang. A Hierarchical Approach for the Resource Management of Very Large Cloud Platforms. IEEE Transactions on Dependable and Secure Computing. 10(5), 253-272, 2013.
13. A. Koziolek, *D. Ardagna*, R. Mirandola. Hybrid Multi-Attribute QoS Optimization in Component Based Software Systems. Journal of Systems and Software. Journal of Systems and Software. Elsevier. 86(10), 2542-2558, 2013.
14. *D. Ardagna*, B. Panicucci, M. Trubian, L. Zhang. Energy-Aware Autonomic Resource Allocation in Multi-tier Virtualized Environments. IEEE Transactions on Services Computing. 5(1), 2-19, 2012.
15. *D. Ardagna*, S. Casolari, M. Colajanni, B. Panicucci. Dual Time-scale Distributed Capacity Allocation and Load Redirect Algorithms for Cloud Systems. Journal of Parallel and Distributed Computing, Elsevier. 72(6), 796-808, 2012.
16. M. Tanelli, *D. Ardagna*, M. Lovera. Identification of LPV state space models for Autonomic Web service systems. IEEE Transactions on Control Systems Technology. 19(1), 93-103, 2011.
17. *D. Ardagna*, L. Baresi, S. Comai, M. Comuzzi, B. Pernici. A Service-based Framework for Flexible Business Processes. IEEE Software. 28(2), 61-67, 2011.
18. *D. Ardagna*, R. Mirandola. Per-flow Optimal Service Selection for Web Services Based Processes. Journal of Systems and Software, Elsevier. 83(8), 1512-1523, 2010.
19. J. Almeida, V. Almeida, *D. Ardagna*, I. Cunha, C. Francalanci, M. Trubian. Joint Admission Control and Resource Allocation in Virtualized Servers. Journal of Parallel and Distributed Computing, Elsevier. 70(4), 344-362, 2010.

20. *D. Ardagna*, C. Francalanci, M. Trubian. Joint Optimization of Hardware and Network costs for Distributed Computer Systems. IEEE Transactions on Systems Man and Cybernetics, Part A. 38, 470-484, 2008.

21. *D. Ardagna*, B. Pernici. Adaptive Service Composition in Flexible Processes. IEEE Transactions on Software Engineering. 33(6), 369-384, 2007.

22. *D. Ardagna*, M. Comuzzi, E. Mussi, P. Plebani, B. Pernici. PAWS: a framework for processes with adaptive Web services. IEEE Software. 24(6), 39-46, 2007.

23. *D. Ardagna*, M. Trubian, L. Zhang. SLA Based Resource Allocation Policies in Autonomic Environments. Journal of Parallel and Distributed Computing. 67, 259-270, Elsevier, 2007.

24. *D. Ardagna*, B. Pernici. Dynamic Web Service Composition with QoS Constraints. International Journal of Business Process Integration and Management (IJBPIM), Vol. 1, No. 4, 233-243, 2006.

25. *D. Ardagna*, C. Francalanci, M. Trubian. A Multi-Model Algorithm for the Cost-Oriented Design of Internet-based Systems. Information Sciences, 176(21), 3105-3131, Elsevier. 2006.

26. *D. Ardagna*, C. Francalanci. Joint Optimization of Hardware and Network Costs. Journal of Parallel and Distributed Computing 66(3), 469-485 Elsevier. 2006.

27. *D. Ardagna*, C. Francalanci. A Cost-Oriented Approach for the Design of IT Architectures. Journal of Information Technology 20(1), 32-51. 2005.

28. *D. Ardagna*, C. Francalanci, V. Piuri. Designing and Rightsizing the Information System Architecture. Information Systems Frontiers 6 (3), 229-245, Kluwer. 2004.

International Conferences

29. *D. Ardagna*, G. P. Gibilisco, M. Ciavotta, A. Lavrentev. A Multi-Model Optimization Framework for the Model Driven Design of Cloud Applications. SSBSE 2014 Proceedings. 61-76. Fortaleza, Brazil.

30. D. Molinari, M. Mazuran, C. Arias, G. Minucci, F. Atun, *D. Ardagna*. Implementing tools to meet the floods directive requirements: a "procedure" to collect, store and manage damage data in the aftermath of flood events. FRIAR 2014 Proceedings. 215-226. Poznan, Poland.

31. F. Giove, D. Longoni, M. Shokrolahi Yancheshmeh, *D. Ardagna*, E. Di Nitto. An approach for the Development of Portable Applications on PaaS Clouds. Closer 2013 Proceedings. 591-601. Aachen Germany.

32. *D. Ardagna*, S. Casolari, B. Panicucci Flexible Distributed Capacity Allocation and Load Redirect Algorithms for Cloud Systems. IEEE Cloud 2011 Proceedings. 163-170. Washignton DC, USA.

33. *D. Ardagna*, B. Panicucci, M. Passacantando A Game Theoretic Formulation of the Service Provisioning Problem in Cloud Systems. WWW 2011 Proceedings. 177-186. Hyderabad, India.

34. *D. Ardagna*, C. Ghezzi, B. Panicucci, M. Trubian. Service Provisioning on the Cloud: Distributed Algorithms for Joint Capacity Allocation and Admission Control. Service Wave 2010 Proceedings, 1-12. Ghent, Belgium.

35. B. Addis, *D. Ardagna*, B. Panicucci , L. Zhang. Autonomic Management of Cloud Service Centers with Availability Guarantees. In IEEE Cloud 2010 Proceedings, 220-227. Miami, Florida, USA.

36. A. Martens, *D. Ardagna*, H. Koziolek, R. Mirandola, R. Reussner. A Hybrid Approach for Multi-Attribute QoS Optimisation in Component Based Software Systems . In QoSA 2010 Proceedings, 84-101. Prague, Czech Republic.

37. *D. Ardagna*, M. Tanelli, M. Lovera, L. Zhang. Black-box Performance Models for Virtualized Web Service Applications . Proceedings of the 1st Joint WOSP/SIPEW International Conference on Performance Engineering. WOSP/SIPEW2010. ACM DL, 153-164. San Jose, CA, USA.

38. M. Tanelli, N. Schiavoni, *D. Ardagna*, M. Lovera. Control-Oriented Multirate LPV Modelling of Virtualized Service Center Environments. Proceedings of the 48th IEEE Conference on Decision and Control (CDC 2009).

39. M. Tanelli, *D. Ardagna*, M. Lovera. LPV Model Identification in Virtualized Service Center Environments. Proceedings of the 15th IFAC Symposium on System Identification (SYSID 2009), 862-867, Saint-Malo, France.

40. M. Tanelli, *D. Ardagna*, M. Lovera. On- and off-line model identification for power management of Web service systems. Proceedings of the 2008 IEEE Conference on Decision and Control, 4497-4502, Cancun, Mexico.

41. M. Tanelli, *D. Ardagna*, M. Lovera, L. Zhang. Model Identification for Energy-aware Management of Web Service Systems. ICSOC 2008 Proceedings, 599-606, Sydney, Australia, December 2008.

42. *D. Ardagna*, C. Cappiello, M. Lovera, B. Pernici, M. Tanelli. Active Energy-Aware Management of Business-Process Based Applications. Position Paper. ServiceWave 2008 Proceedings, 183-195, Madrid, Spain, December 2008.

43. *D. Ardagna*, C. Ghezzi, R. Mirandola. Model Driven QoS Analyses of Composed Web Services. ServiceWave 2008 Proceedings, 299-311, Madrid, Spain, December 2008.

44. *D. Ardagna*, C. Ghezzi, R. Mirandola. Rethinking the use of models in software architecture. QoSA 2008 Proceedings, 1-27, Karlsruhe, Germany, October 2008.

45. B. Pernici, *D. Ardagna*, C. Cappiello. Business Process Design: Towards Service-Based Green Information Systems. IFIP 20th World Computer Congress Proceedings, 195-203, Milan, Italy, September 2008.

46. M. Tanelli, *D. Ardagna*, M. Lovera. LPV model identification for Power Management of Web service Systems. Proceedings of the 2008 IEEE Multi-conference on Systems and Control, 1171-1176, San Antonio, Texas, USA, September 2008.

47. *D. Ardagna*, S. Comai, A. Corallo, G.Giunta, L. Iandoli, N. Ingraffia. A Distributed Information System to Coordinate and Support Business Process Execution in a Cluster of Firms. GITMA07 Proceedings (8th Annual Global Information Technology Management Association World Conference), Naples, Italy, June 2007.

48. *D. Ardagna*, G. Giunta, N. Ingraffia, R. Mirandola, B. Pernici. QoS-driven Web Services Selection in Autonomic Grid Environments. GADA06 Proceedings (Int. Symposium on Grid computing, High-Performance and Distributed Applications), LNCS 4276, 1273-1289, Montpellier, November 2006.

49. *D. Ardagna*, C. Cappiello, C. Francalanci, A. Groppi. Brokering Multisource Data with Quality Constraints. ODBASE06 Proceedings (5th International Conference on Ontologies, DataBases, and Applications of Semantics), 807-817, Montpellier, November 2006.

50. J. Almeida, V. Almeida, *D. Ardagna*, C. Francalanci, M. Trubian. Resource Management in the Autonomic Service-Oriented Architecture. ICAC 2006 Proceedings (3rd International Conference on Autonomic Computing), 84-92, Dublin June 2006.

51. *D. Ardagna*, C. Cappiello, M. Comuzzi, C. Francalanci, B. Pernici. A Broker For Selecting And Provisioning High Quality Syndicated Data. ICIQ 2005 Proceedings (10th International Conference on Information Quality), 262-279. Boston, November 2005.

52. *D. Ardagna*, M. Trubian, L. Zhang. SLA Based Profit Optimization in Multi-tier Systems. IEEE NCA 2005 Proceedings (4th International Symposium on Network Computing and Applications), 263-266. Boston, July 2005.

53. *D. Ardagna*, C. Francalanci, G. Bazzigaluppi, M. Gatti, F. Silveri, M.Trubian. A Cost-oriented tool to support server consolidation. ICEIS 2005 Proceedings (7th International Conference on Enterprise Information Systems), 323-330. Miami, Florida, May 2005.

54. L. Zhang, *D. Ardagna*. SLA Based Profit Optimization in Autonomic Computing Systems. ICSOC 2004 Proceedings ACM press (2nd International Conference on Service Oriented Computing), 173-182. New York, November 2004.

55. *D. Ardagna*, C. Francalanci, V. Piuri, F. Scotti. Evolutionary Design of Information Systems Architectures. ICAISC 2004 Proceedings (7th International Conference on Artificial Intelligence and Soft Computing), 1-8. Invited paper. Zakopane, Poland, June 2004.

56. *D. Ardagna*, C. Francalanci, M. Trubian. A Cost-oriented Approach for Infftrastructural Design. SAC 2004 Proceedings (19th ACM Symposium on Applied Computing), 1431-1437. Nicosia, Cyprus, March 2004.

57. *D. Ardagna*, C. Francalanci, M. Trubian. A Multi-Model Algorithm for the cost-oriented design of the Information Technology Infrastructure. ECIS 2003 Proceedings (11th European Conference on Information Systems). Naples, June 2003.

58. *D. Ardagna*, C. Francalanci. A Cost-Oriented methodology for the design of Web based IT Architectures. SAC2002 Proceedings (17th ACM Symposium on Applied Computing), 1127-1133. Madrid, March 2002.

International Workshops

59. G. Casale, *D. Ardagna*, M. Artac, F. Barbier, E. Di Nitto, A. Henry, G. Iuhasz, C. Joubert, J. Merseguer, V. I. Munteanu, J. F. Pérez, D. Petcu, M. Rossi, C. Sheridan, I. Spais, D. Vladušič. DICE: Quality-Driven Development of Data-Intensive Cloud Applications. MiSE 2015 Workshops Proceedings. To Appear. Florence, Italy.

60. *D. Ardagna*, M. Ciavotta, R. Lancellotti. A Receding Horizon Approach for the Runtime Management of IaaS Cloud Systems. MICAS-SYNASC 2014 Workshops Proceedings. To Appear. Timisoara, Romania.

61. M. Malekimajd, A. M. Rizzi, *D. Ardagna*, M. Ciavotta, M. Passacantando, A. Movaghar. Optimal Capacity Allocation for executing Map Reduce Jobs in Cloud Systems. MICAS-SYNASC 2014 Workshops Proceedings. To Appear. Timisoara, Romania.

62. G. Rumi, C. Colella, *D. Ardagna*. Optimization techniques within the Hadoop ecosystem: A Survey. MICAS-SYNASC 2014 Workshops Proceedings. To Appear. Timisoara, Romania.

63. D. Petcu, E. Di Nitto, *D. Ardagna*, A. Solberg, G. Casale. Towards Multi-Clouds Engineering (invited paper). IEEE INFOCOM CrossClouds 2014 Workshop Proceedings. 1-6,Toronto, Canada.

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