CURRICULUM VITAE ET STUDIORUM
Danilo Ardagna

Politecnico di Milano,
Dipartimento di Elettronica, Informazione e Bioingegneria
Via Golgi 42, 201333 Milano, Italy
Telephone: +39-02 2399 3514
e-mail: danilo.ardagna@polimi.it
Born: June 8, 1973—Monza (MB), Italy
Nationality: Italian

highlights	**100+ peer-reviewed publications**, including **40 journal** papers, and **12 IEEE/ACM Trans.**
	Co-author of **65** scientific publications on **peer-reviewed conferences/workshops**
	Co-author of **6 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)**
	14 Invited Talks/Seminars/Panels (2007-2018)
	3 tutorials
	2 best paper awards
	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 **2.3mln euros** of funding to date
	IBM 2016 SUR grant, big data P8 cluster donation. Joint work with Prof. Cristina Silvano and Prof. Letizia Tanca
	IBM 2010 faculty award for research on virtualized systems
	Top Compsci University Azure Adoption research October 2016, July 2017, July 2018
	Amazon AWS in Education research grant **May 2014**, **March 2012,** and **December 2010**. Joint work with Prof. Elisabetta Di Nitto and Prof. Gianpaolo Cugola
	Windows Azure Research Pass October 2013. Joint work with Prof. Elisabetta Di Nitto
	Politecnico di Milano Fondi **5 per mille 2013 Poli-RISPOSTA project co-applicant**
	Politecnico di Milano Fondi **5 per mille 2009 GAME-IT Principal Investigator**
	Based on Google Scholar (2/1/2019), my **h-index** is **28** and total number of **citations** is **4471** (**2944 since 2014**), with first published paper in 2002. My **top ranked paper** was published in 2007 collecting up to **976 citations**

appointment	
	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

education	
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, Cloud and Big Data systems. Optimization algorithms and game theory applications to resource management of very large-scale data centers. Performance modelling, design and runtime management of Big Data applications. Machine learning models for Data Intensive application performance prediction. 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.

| awards | **Best paper** |

D. Ardagna, S. Bernardi, E. Gianniti, S. Karimian Aliabadi, D. Perez-Palacin, J. I. Requeno. Modeling Performance of Hadoop Applications: A Journey from Queueing Networks to Stochastic Well Formed Nets. ICA3PP 2016 Proceedings. Granada, Spain. *Best paper award.*

A. Evangelinou, M. Ciavotta, G. Kousiouris, *D. Ardagna*. A Joint Benchmark-Analytic Approach For Design-Time Assessment of Multi-Cloud Applications. In CF2015 Proceedings. Pisa, Italy. *Best collaboration paper award (European projects track).*

MICROSOFT CLOUD SERVICES
- Top Compsci University Azure Adoption. October 2016 (20k$), July 2017 (20k$), July 2018 (15k$)
- Windows Azure Research Pass October 2013. Joint work with Prof. Elisabetta Di Nitto, DEEP-SE Cloud initiative (40k$)

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

IBM
- IBM SUR Grant October 2016. Joint work with Prof. Cristina Silvano and Prof. Letizia Tanca. P8 based cluster for Big Data research (80keu)
- IBM Faculty Award 2010. The PARVIS project has been funded 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**

BIG DATA APPLICATIONS
- Performance modelling of GPGPU systems through machine learning and hybrid machine learning
- Runtime management of Big Data and computing intensive applications: optimization models and game theory models for the development of efficient runtime management policies
- Big Data applications performance modelling: machine learning and hybrid machine learning techniques for gray box performance modelling, simulation models based on Stochastic Well Formed Petri Nets for MapReduce and Spark
- Model-driven-development of Data-Intensive Applications: methodology and tools for data-aware quality-driven development and optimization 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 Provider 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**
2016	One week visit at IBM T.J. Watson Research Centre. Participating to research projects on performance analysis and management of Spark applications with Machine Learning and Hybrid Machine Learning techniques, within the Infrastructures Performance Analysis and System Optimization Group
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

2017-	**Coordinator for Politecnico di Milano research unit** for the ATMOSPHERE H2020 project involved in the performance modelling and prediction of container based and GPU based applications
2016-	Participate to **DOSSIER-Cloud Twinning** project, providing expertise on Cloud services, resource and energy management for large scale data centers and big data systems
2016-2017	**Coordinator for Politecnico di Milano research unit** for the EUBRA-BIGSEA H2020 project involved in the performance analysis and definition of run time management policies of Big Data and computing intensive applications
2015-2018	**Coordinator for Politecnico di Milano research unit** for the DICE H2020 project on model driven design, quality assessment, and optimization of Data-Intensive applications. Standardization leader and Ethics issue manager for data privacy
2016 - 2017	**Coordinator for Politecnico di Milano research unit** for the UrbanMob LISA Cineca project on development of urban mobility applications with data and performance quality
2012-2015	Participated to 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)
- IEEE CLOUD-II 2019-2009
- IEEE Big Data 2016-2014, 2019-2017 Senior PC member
- IEEE ICWS 2012- 2009
- IEEE/ACM UCC 2018
- IEEE ICDCS 2017, 2012
- IEEE ICPADS 2012
- IEEE DSS 2018-2017
- CIoT 2016
- IEEE BigDataSE 2016
- IEEE IC2E 2015
- OBD 2015
- IEEE ICAC 2015-2014
- IFIP DAIS 2014
- IEEE ICA3PP 2018, 2016-2015
- Closer 2017, 2015- 2013
- IEEE BDDS 2013
- IEEE MASCOTS 2014-2013
- IEEE CGC 2013
- IEEE HPCC 2013
- IEEE SmartData 2017
- QoSA 2011-2009
- 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
- Since March 2018, Editorial board member of the IEEE Transactions on Cloud Computing
- 2018 Guest co-Editor, MDPI Algorithms, Algorithms for the Resource Management of Autonomic Infrastructures special issue
- Since August 2017 Editorial board member of the MDPI Big Data and Cognitive Computing journal
- Since 2015 Editorial board member of the Springer open access BioMed Big Data Analytics journal
- 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 of the International Journal of Cloud-Computing and Super-Computing

INTERNATIONAL WORKSHOPS CO-ORGANIZER AND CO-CHAIR
- Second International Workshop On Quality-Aware Devops (QUDOS) 2016, at ISSTA 2016
- First International Workshop On Quality-Aware Devops (QUDOS) 2015, at ESEC/FSE 2015
- 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

STEERING COMMITTEES
- Steering Committee of the International Workshop On Quality-Aware Devops (QUDOS) 2017-

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 Transactions on Storage
- IEEE Systems Journal
- ACM Transactions on the Web
- ACM Transactions on Modeling and Performance Evaluation of Computing Systems
- 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
- ERC Consolidator grants expert evaluator, 2017
- Member of the Netherlands Research Council for the Engineering and Applied Sciences Executive Board, 2015, 2016
- Member of the Netherlands Organisation for Scientific Research Executive Board, 2013
- Member of the Austrian Science Fund Executive Board, 2012, 2013

EXTERNAL REFEREE ACADEMIC PROMOTION
- External referee for the assessment of University of Calgary applications for Promotion to Professor, 2018

ROLES WITHIN IEEE COMPUTER SOCIETY
- May 2014 - July 2015, 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

KEYNOTE SPEECHES
- Cloud and Multi-Cloud Computing: Current Challenges and Future Applications. A Quality of Service Perspective, 23/5/2015. PESOS Workshop at ICSE 2015

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
- 2006-2017, 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
- 2016-: Algorithms and Parallel Computing
- 2015-2016: Computer Systems
- 2015-2016: Multi-disciplinary Project, Politecnico di Milano, Master and PhD program Politecnico di Milano
- 2012-2014, 2017-: Multi-disciplinary Project, Politecnico di Milano
- 2011-12; 2013-14: Cloud Computing from a Software Engineering perspective, Master and PhD program Politecnico di Milano
- 2007-2008: Autonomic Services, PhD course Politecnico di Milano
- 2015-2016: Graduate seminars on Computer Infrastructures, 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
- 2017-: Postdoctoral research advisor for Dr. Marco Lattuada
- 2018: Postdoctoral research advisor for Dr. Eugenio Gianniti
- 2017- 2018: Postdoctoral research advisor for Dr. Enrico Barbierato
- 2016-2017: Postdoctoral research advisor for Dr. Athanasia Evangelinou
- 2012- 2016: Postdoctoral research advisor for Dr. Michele Ciavotta
- 2009-2010: Postdoctoral research advisor for Dr. Barbara Stefania Panicucci

- 2015- 2018: Supervisor for PhD. Student Eugenio Gianniti
- 2013- 2016: Supervisor for PhD. Student Giovanni Paolo Gibilisco
- 2010-2012: Co-Supervisor for PhD. Student Niccolò Maria Calcavecchia
- 2015-2016: Supervisor of the Minor research for PhD. Student Alessandro Maria Rizzi
- 2015: Supervisor of the Minor research for PhD. Student Lorela Cano
- 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
- Marcelo Amaral, PhD Evaluation commission, Polytechnic University of Catalonia, 2019
- Gustavo Cipriano Motta Sousa, PhD Evaluation commission, University of Lille, 2018
- Yasaman Amannejad, PhD Evaluation commission, University of Calgary, 2017

- Marco Abundo, PhD Thesis reviewer, Università Tor Vergata, 2016
- Nicolas Poggi, 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*, C. Canali, R. Lancellotti. MDPI Algorithms. Algorithms for the Resource Management of Large Scale Infrastructures. MDPI 2018.
2. *D. Ardagna*, C. Cappiello. Springer Computing. Special Issue on Sustainable Computing Systems and Applications. Springer 2017.
3. *D. Ardagna*, A. Brunnert, G. Casale, A. van Hoorn. Proceedings of the second International Workshop on Quality-Aware DevOps. ACM 2016.
4. *D. Ardagna*, A. Brunnert, G. Casale, A. van Hoorn. Proceedings of the first International Workshop on Quality-Aware DevOps. ACM 2015.
5. *D. Ardagna*, M. S. Squillante. SIGMETRICS Performance Evaluation Review Special Issue on Performance and Resource Management in Big Data Applications. ACM DL 2015.
6. *D. Ardagna*, C. Cappiello. Proceedings of Fourth International Conference on Green IT Solutions. SCITEPRESS 2015.
7. *D. Ardagna*, L. Schubert. Springer Computing. Special Issue on Cloud Computing. Springer 2015.
8. *D. Ardagna*, L. Schubert. Proceedings of the 2013 international workshop on Multi-cloud applications and federated clouds. ACM DL 2013.
9. *D. Ardagna*, L. Zhang. Run-time Models for Self-managing Systems and Applications. Springer Autonomic Computing Series 2010.
10. *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. Springer 2009.

International Journals

1. E. Gianniti, M. Ciavotta, *D. Ardagna*. Optimizing Quality-Aware Big Data Applications in the Cloud. IEEE Transactions on Cloud Computing. To Appear.
2. *D. Ardagna*, M. Ciavotta, R. Lancellotti, M. Guerriero. A Hierarchical Receding Horizon Algorithm for QoS-driven control of Multi-IaaS Applications. IEEE Transactions on Cloud Computing. To Appear.
3. E. Ataie, R. Entezari-Maleki, L. Rashidi, K. S. Trivedi, *D. Ardagna*, A. Movaghar. Hierarchical Stochastic Models for Performance, Availability, and Power Consumption Analysis of IaaS Clouds. IEEE Transactions on Cloud Computing. To Appear.
4. D. Ardagna, C. Cappiello, W. Samà, M. Vitali. Context-aware Data Quality Assessment for Big Data. Future Generation Computer Systems. Elsevier. 89, 548-562. 2018.

5. L. Cano, G. Carello, D. Ardagna. A Framework for Joint Resource Allocation of MapReduce and Web Service Applications in a Shared Cloud Cluster. Journal of Parallel and Distributed Computing, Elsevier. 120, 127-147. 2018.

6. M. Malekimajd, *D. Ardagna*, M. Ciavotta, E. Gianniti, M. Passacantando, A. M. Rizzi. Capacity Allocation and Admission Control of MapReduce Jobs. The Journal of Supercomputing. 74(10), 5314-5348. 2018.

7. E. Ataie, R. Entezari-Maleki, S. E. Etesami, B. Egger, *Danilo Ardagna*, A. Movaghar. Power-aware Performance Analysis of Self-Adaptive Resource Management in IaaS Clouds. Future Generation Computer Systems. Elsevier. 86, 134-144. 2018.

8. J. Anselmi, *D. Ardagna*, J. C.S. Lui, A. Wierman, Y. Xu, Z. Yang. The Economics of the Cloud. ACM Transactions on Modeling and Performance Evaluation of Computing Systems. 2(4), 1-23. 2017.

9. M. Scavuzzo, E. Di Nitto, *D. Ardagna*. Experiences and Challenges in Building a Data Intensive System for Data Migration. Empirical Software Engineering Journal. 23(1), 52-86. 2018.

10. A. Evangelinou, M. Ciavotta, *D. Ardagna*, A. Kopaneli, G. Kousiouris, T. Varvarigou. Enterprise Applications Cloud Rightsizing through a Joint Benchmarking and Optimization Approach. Future Generation Computer Systems. Elsevier. 78(1), 102-114. 2018.

11. F. Ballio, D. Molinari, G. Minucci, M. Mazuran, C. Arias, S. Menoni, F. Atun, *D. Ardagna*, N. Berni, C. Pandolfo. The RISPOSTA procedure for the collection, storage and analysis of high quality, consistent and reliable damage data in the aftermath of floods. Journal of Flood Risk Management. Wiley on line. To Appear.

12. E. Gianniti, A. M. Rizzi, E. Barbierato, M. Gribaudo, *D. Ardagna*. Fluid Petri Nets for the Performance Evaluation of MapReduce and Spark Applications. ACM SIGMETRICS Performance Evaluation Review. 44(4), 23-36. 2017.

13. *D. Ardagna*, M. Ciavotta, M. Passacantando. Generalized Nash Equilibria for the Service Provisioning Problem in Multi-Cloud Systems. IEEE Transactions on Services Computing. 10(3), 381-395. 2017.

14. M. Ciavotta, G. P. Gibilisco, *D. Ardagna*. A Mixed Integer Linear Programming Optimization Approach for Multi-Cloud Capacity Allocation. Journal of Systems and Software. Elsevier. 123(1), 64-78. 2017.

15. M. Passacantando, *D. Ardagna*, A. Savi. Service Provisioning Problem in Cloud and multi-Cloud Systems. INFORMS Journal on Computing. 28(2), 265-277. 2016.

16. M. Malekimajd, *D. Ardagna*, M. Ciavotta, A. M. Rizzi, M. Passacantando. Optimal Map Reduce Job Capacity Allocation in Cloud Systems. ACM SIGMETRICS Performance Evaluation Review, 42 (4), 50-60. 2015.

17. *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.

18. B. Addis, *D. Ardagna*, A. Capone, G. Carello. Energy-aware Joint Management of Networks and Cloud Infrastructures. Computer Networks. 70, 75-95, 2014.

19. J. Anselmi, *D. Ardagna*, M. Passacantando. Generalized Nash Equilibria for SaaS/PaaS Clouds. European Journal of Operational Research. 236(1), 326-339, 2014.

20. J. Anselmi, *D. Ardagna*, J. C. S. Lui, Adam Wierman, Y. Xu, Z. Yang. The economics of the cloud: price competition and congestion. ACM SIGMETRICS Performance Evaluation Review. 41(4), 47-49, 2014.

21. 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.

22. 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.

23. *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.

24. 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.

25. 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.

26. *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.

27. *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.

28. 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.

29. *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.

30. *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.

31. 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.

32. *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.

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

34. *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.

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