

# LUCIANO BARESI

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## Education

1992 Laurea (Master's) degree in Electronic engineering (Computer Science) - Politecnico di Milano  
1997 PhD degree in Computer Science - Politecnico di Milano (advisor: Professor Mauro Pezzè)

## Academic positions

1998-1999 Visiting researcher at University of Oregon – Eugene, USA (jun-sep 1998 and jun-sep 1999)  
2001 Visiting professor at University of Oregon – Eugene, USA (jan-mar)  
2001-2003 Assistant professor, Politecnico di Milano  
2003 Visiting researcher at University of Paderborn, Germany (jan-feb and oct-nov)  
2003-2015 Associate professor, Politecnico di Milano  
2008 Visiting professor at Tongji University, Shanghai, China, in the context of PoliTong and of the Sino-Italian campus (sep-oct)  
2015- Full professor, Dipartimento di Elettronica Informazione e Bioingegneria, Politecnico di Milano

## Awards

1998- CNR (Italian National Research Council) grant, short-term mobility, for the research periods at the University of Oregon (Eugene – USA) (jun-sep)  
2006 IBM Shared University Research (SUR) Award for the project called WS-Testing, with professor Alessandro Orso, Georgia Institute of Technology, USA  
2007 IBM Faculty Award for the project called Development of a curriculum on service engineering, with professor Barbara Pernici, Politecnico di Milano, Italy.  
2020 RE 2020 Most Influential Paper (MIP) Award for the impact of your RE 2010 paper entitled "Fuzzy Goals for Requirements-Driven Adaptation," (co-authored with L. Pasquale and P. Spoletini) which was first presented at the 2010 IEEE International Requirements Engineering Conference in Sydney, Australia.

## Teaching activities

2001- Different introductory courses in computer science, software engineering, and software design courses, Politecnico di Milano  
2001 Diagram Languages: UML and Beyond (CIS 410/510), University of Oregon, Eugene, USA  
2007-2010 Service Technologies, master's degree, Politecnico di Milano (course creator)  
2008 Software engineering and Advanced programming, Tongji University, Shanghai, China  
2012- Design and implementation of mobile application, master's degree, Politecnico di Milano (course creator)

## Professional activities

### Politecnico di Milano

2009-2011 Chair of the bachelor's degree program in Engineering Computing Systems, Politecnico di Milano, Cremona campus  
2011-2016 Member of the board of professors of the doctoral program in Information Technology at Politecnico di Milano  
2013-2017 Co-coordinator of S-Cube, research lab at Politecnico in cooperation with Telecom Italia

- 2017- Responsible of exchange students (e.g., double degrees and Erasmus+ students) for computer engineering students at Politecnico di Milano.
- 2018-2020 Member of the board of professors of the doctoral program in Data Science and Computation at Università di Bologna and Politecnico di Milano

**Organization of scientific meetings**

- 2016 General chair, IEEE/IFIP Working Conference on Software Architecture (WICSA, 110 participants)
- 2002 Program co-chair, IEEE International Conference on Engineering of Complex Computer Systems (ICECCS, 40 participants), with M. Hinchey, M. Chen e S. Liu.
- 2006 Program co-chair, ETAPS Fundamental Approaches to Software Engineering (FASE, 150 participants), with R. Heckel
- 2007 Program co-chair, International Conference on Web Engineering (ICWE, 80 participants), with G.-J. Houben
- 2009 Program co-chair, International Conference on Service-oriented Computing (ICSOC, 200 participants), with J. Suzuki e C.H. Chi
- 2012 Program chair, International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS, 50 participants)
- 2013 Program co-chair, Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE, 300 participants), with Mira Mezini
- 2019-2020 Program co-chair, IEEE International Conference on Service Computing, held as part of the IEEE Service Congress.
- 2005- Workshop chair for the Joint meeting of the European Software Engineering Conference and the Symposium on the Foundations of Software Engineering (ESEC/FSE, 300 participants) (2005), the International Conference on Software Engineering (ICSE, 1000 participants), (2009) (with V. Braberman), and the International Requirements Engineering Conference (RE, 100 participants), 2011 (with D. Amyot). I was publicity chair for the International Software Metrics Symposium (Metrics, 100 participants) (2005), poster chair for International Conference on Software Engineering (ICSE, 1000 participants) (2013), and local arrangement chair for the Joint meeting of the European Software Engineering Conference and the Symposium on the Foundations of Software Engineering (ESEC/FSE, 300 participants), 2015 (with Angelo Gargantini).
- 2013 Co-organizer, Customizing Service Platforms, Dagstuhl seminar, with Heiko Ludwig, Andreas Rummler, and Klaus Schmid (April 2013)
- 2014 Co-organizer, Feature Interactions: The Next Generation, Dagstuhl seminar, with Sven Apel, Pamela Zave, and Jo Atlee (July 2014)
- 2003-2017 Workshop co-organizer: International Workshop on Ubiquitous Mobile Information and Communication Systems, satellite event of CAiSE (UMICS) 2003 and 2004 (with S. Dustdar, H. Gall, and M. Matera), International Workshop on Service-Oriented Computing: Consequences for Engineering Requirements, satellite event of RE (SOCCER) 2005, 2006, 2007, 2008, and 2011 (with N. Maiden), International Workshop on Model-based Modernization of Complex Software Systems, satellite event of ECDMA (MMSS) 2008 (with J. Bezivin), Workshop on Services, Clouds, and Alternative Design Strategies for Variant-Rich Software Systems, satellite event of SPLC 2011 and 2012 (with Karina Villela, Sholom Cohen, Jaejoon Lee, and Klaus Schmid), Third International Workshop on Engineering Multi-Agent Systems, satellite event of AAMAS 2015 (with Matteo Baldoni and Mehdi Dastani), International Workshop on BIG Data Software Engineering, satellite event of ICSE 2015 and 2016 (with Tim Menzies, Andreas Metzger, and Thomas Zimmermann), and Tenth International Workshop on Dynamic Software Product Lines - Adaptive Systems through Runtime Variability, satellite event of SPLC 2017 (with Jesper Anderson, Rafael Capilla, and Holger Eichelberger).

**Reviewer for and editorial boards**

- 2001- Member of many scientific program committees. The most important ones are: International Conference on Service-Oriented Computing, Conference on Web Services, International Conference on Software Engineering, European Software Engineering Conference, Symposium on the Foundations of Software Engineering, Symposium on Software Engineering for Adaptive and Self-Managing Systems, Self-Adaptive and Self-Organizing Systems Conference, and International Conference on Autonomic Computing
- 2004- External reviewer/member of the evaluation committee for 22 PhD dissertations at universities in Italy, UK, France, Australia, Canada, India, Germany, Austria, Sweden, and Brazil

- 2005- Project evaluator and reviewer for: European Union, Netherlands Organisation for Scientific Research (Netherlands), Mitacs (Canada), Vienna Science and Technology Fund (Austria), National Council for Scientific Research (Romania), Fundação para a Ciência e a Tecnologia (Portugal), TrentoRISE (Italy), INRIA (France), Israel Science Foundation (Israel), Provincia Autonoma di Trento (Italy), Regione Puglia (Italy), Swiss Science Foundation (Switzerland), and Icelandic Research Fund (Iceland)
- 2009-2015 Editorial board member, Service Oriented Computing and Applications (Springer)
- 2012- Editorial board member, Transactions on Autonomous and Adaptive Systems (ACM)
- 2013-2017 Editorial board member, Transactions on Software Engineering (IEEE)
- 2013- Editorial board member, Transactions on Service Computing (IEEE)
- 2016- Editorial board member, Requirements Engineering (Springer)
- 2018- Editorial board member, IEEE Software (IEEE)
- 2020- Editorial board member, Science of Computer Programming (Elsevier)

### Other activities

- 2012-2016 Co-founder and chair of the IFIP WG on Services-Oriented Systems (2.14, 6.12, 8.10)
- 2015- Chair of the Steering Committee of the European Software Engineering Conference, and from 2018 of the integrated Steering Committee of the European Software Engineering Conference and of the Symposium on the Foundations of Software Engineering
- 2015- Member, Association for Computing Machinery (ACM)
- 2020- Member of the Research Committee at Free University of Bolzano (Italy)

## Young researchers

### PhD students

**Advisor:** Naser Derakhshan (2016), Sam Guinea (2007, co-advised with Carlo Ghezzi), Anita Imani (2016), Danilo Mendonça (2019), Matteo Miraz (2010), Alfredo Motta (2012), Liliana Pasquale (2010), Mohammad Pourhashem (2015), Giovanni Quattrocchi (2016), Mersedeh Sadeghi (2018), Adnan Shahzada (2015).

**External reviewer:** Anna Rita Laurenzi, Univeristà dell'Aquila (Italy), 2004, Fabio De Rosa, Università di Roma la Sapienza (Italy), 2006, Khaled Mahbub, City University London (UK), 2006, Cristina Marin, Universite Grenoble 1 (France), 2008, Dhaminda Buddhika Abeywickrama, Monash University (Australia), 2010, Jocelyn Simmonds, University of Toronto (Canada), 2010, Fabiano Dalpiaz, Università di Trento (Italy), 2011, Vikas Agarwal, Indian Institute of Technology, Kanpur (India), 2011, Garth Heward, Swinburne University of Technology (Australia), 2012, Asli Zengin, Università di Trento (Italy), 2012, Heorhi Raik, Università di Trento (Italy), 2012, Walter Rudametkin Ivey, Universite Grenoble 1 (France), 2013, Adina Sirbu, Università di Trento (Italy), 2013, Basil Becker, University of Potsdam (Germany), 2014, Gil Didac, Linnaeus University (Sweden), 2014, Christian Inzinger, Technical University Vienna (Austria), 2014, Abel Silva Lizcano, Politecnico di Milano, PhD program in Spatial Planning and Urban Development, 2014, Felipe Pontes Guimarães, Universidade de Sao Paulo (Brasil), 2017, Luigi Manco, Università del Salento (Italy), 2017, Martina De Sanctis, Università di Trento/FBK (Italy), 2018, Edith Zavala, Universitat, Politecnica de Catalunya (Spain), 2019, Antonio Teofilo, Universidade Nova de Lisboa (Portugal), 2020, Alessandro Aliberti Politecnico di Torino (Italy), 2020.

### Post-doc researchers

Martin Garriga (past), Valerio Panzica La Manna (past), Giovanni Quattrocchi, Clement Quinton (past), Nicholas Rasi, Konstantin Rubinov (past), Yu Zhu (past).

## Research projects

### Principal investigator at the Politecnico di Milano

- 2006-2008 MOMOCS (MOdel driven MOdernisation of Complex Systems): EU FP6 (Specific Targeted Research Project): IST-2005-2.5.5 - Software and Services
- 2008-2011 SLA@SOI (Empowering the Service Economy with SLA-aware Infrastructures), EU FP7 (Collaborative project): ICT-2007.1.2 - Service and software architectures, infrastructures and engineering
- 2010-2012 MADES (Model-based methods and tools for Avionics and surveillance embeddeD SystEmS), EU FP7 (Collaborative project): ICT-2009.3.4 - Embedded Systems Design
- 2010-2013 INDENICA (Engineering Virtual Domain-Specific Service Platforms). EU FP7 (Collaborative project): ICT-2009.1.2 - Internet of Services, Software and Virtualisation
- 2012-2014 SITAD (Sistema Integrato di Telemedicina e Assistenza Domiciliare) - Regione Lombardia e Ministero dell'Istruzione, Università e Ricerca

- 2014-2017 EEB – Edifici A Zero Consumo Energetico In Distretti Urbani Intelligenti (Italian Technology Cluster for Smart Communities) - PON Ricerca e Competitività, Ministero dell’Istruzione, Università e Ricerca
- 2014-2021 ITS Italy 2020 - Soluzioni ICT a supporto della logistica e dei processi di trasporto (Italian Technology Cluster on Transportation). – PON Ricerca e Competitività, Ministero dell’Istruzione, Università e Ricerca
- 2016-2018 Sistema innovativo di Big Data Analytics. Accordi di Competitività della Regione Lombardia
- 2016-2018 Dossier-cloud (DevOps-based Software Engineering for the Cloud. EU H2020 (Coordination and support action): H2020-TWINN-2015 – Twinning
- 2017 MeMoSa (in-car Media Entertainment Mobility and Safety). EIT (European Institute of Innovation and Technology) Digital
- 2017-2020 Gauss (Governing Adaptive and Unplanned Systems of Systems), Italian Ministry of Education, University and Research, PRIN program
- 2019-2022 Sisma (Solutions for Engineering Microservices Architectures), Italian Ministry of Education, University and Research, PRIN program

### **Technical coordinator**

- 2014-2015 Giocosio (Giochi pediatrici per la comunicazione e la socializzazione). Smart Cities and Communities - Regione Lombardia
- 2014-2018 PSC (Piattaforma dei servizi nel settore della giustizia civile). Smart Cities and Communities, Ministero dell’Istruzione, Università e Ricerca
- 2020-2023 ICT4D: Innovation Space as an Interface between Eduardo Mondlane University and Mozambican Society by promoting Science, Technology and Innovation. Supported by the Italian Agency for Cooperation and Development

## **Tutorials**

### **Graph transformation systems**

- Luciano Baresi and Reiko Heikel. Foundations and Applications of Graph Transformation. 1st International Conference on Graph Transformation. October 2002
- Luciano Baresi and Reiko Heikel. Tutorial Introduction to Graph Transformation: A Software Engineering Perspective. 2nd International Conference on Graph Transformation. October 2004

### **Web quality**

- Luciano Baresi and Sandro Morasca. An Introduction to Web Quality. 4th International Conference on Web Engineering. July 2004

### **Web services**

- Luciano Baresi, Maristella Matera, and Pierluigi Plebani. Models and Technologies for e-Service Composition. 1st ICSOC. December 2003
- Luciano Baresi and Sam Guinea. An Introduction to Self-healing Web Services. 10th IEEE International Conference on the Engineering of Complex Computer Systems. June 2005
- Luciano Baresi and Sam Guinea. An Introduction to Self-healing Web Services. 10th European Software Engineering Conference and 13th ACM SIGSOFT International Symposium on the Foundations of Software Engineering. September 2005
- Luciano Baresi and Sam Guinea. Towards Dynamic Web Services. 28th International Conference on Software Engineering. May 2006
- Luciano Baresi, Elisabetta Di Nitto, and Massimiliano Di Penta. Monitoring of Service Oriented Systems and Recovery Actions. 5th ICSOC. September 2007
- Luciano Baresi. Microservices, Containers and Software Engineering. 14th International Summer School on Software Engineering. July 2019 Salerno (Italy)

### **Self-\* systems**

- Luciano Baresi. Adaptive and Self-Managing Systems. 7th International Summer School on Software Engineering. July 2010 Salerno (Italy)
- Luciano Baresi and Sam Guinea. Architectural Styles for Adaptive Systems. 6th International Conference on Self-Adaptive and Self-Organizing Systems. September 2012, Lyon (France)
- Luciano Baresi. Adaptive and Self-Managing Systems. 3rd Brazilian Conference on Software: Theory and Practice (CBSOFT). September 2012, Natal (Brazil)

## Invited presentations

- Luciano Baresi. A Comprehensive Framework for the Development of Complex Smart Spaces. Friday Informatics Seminars, UCI - Irvine (USA), March 2015.
- Luciano Baresi. Self-adaptive systems, services, and product lines. 18th International Software Product Line Conference, September 2014.
- Luciano Baresi. My first ten years with self-adaptive software. 3rd International Workshop on Variability in Software Architecture (VARSA), satellite event of WICSA, April 2014.
- Luciano Baresi. Is runtime validation really needed? 2nd International Workshop on Quality Assurance for Service-based applications, satellite event of ISSTA, July 2013.
- Luciano Baresi. Software Engineering and Multi-Agent Systems (in the context of Self-\* Software). The workshop on Engineering Multi-Agent Systems (EMAS), satellite of AAMAS, May 2013.
- Luciano Baresi. My first ten years with self-adaptive software. The Symposium on Software Complexity and Evolution: Advances and Visions (Trento), February 2013.
- Luciano Baresi. Self-adaptive Service Compositions. The 2008 Middleware for Web Services (MWS 2008) Workshop, satellite event of EDOC, 2008.
- Luciano Baresi. A Dynamic and Reactive Approach to the Supervision of BPEL Processes. Presented at IBM T.J. Watson New York (USA), July 2008
- Luciano Baresi. SoA and Web 2.0: Married or Engaged? 9th IEEE Symposium on Web Site Evolution, satellite event of ICSM, 2007.
- Luciano Baresi. Towards Dynamic Web Services. The ICSE 2006 Workshop on Software Engineering for Adaptive and Self-Managing Systems (SEAMS), 2006.
- Luciano Baresi and Mauro Pezzè. Petri Nets as Semantic Domain for Diagram Notations. In Proceedings of the Workshop on Petri Nets and Graph Transformations, satellite event of ICGT 2004. Electronic Notes in Theoretical Computer Science, vol. 127(2), 29-44, 2005.
- Luciano Baresi and Mauro Pezzè. Can Graph Grammars make Formal Methods more Human? In Proceedings of the Workshop on Graph Transformation and Visual Modeling Techniques, satellite event of ICALP 2000. Proceedings of ICALP Workshops 2000, 387-394. July 2000.

## Publications

### Ten most representative publications (in the last 10 years)

- Luciano Baresi, Alberto Leva e Giovanni Quattrocchi: Fine-Grained Dynamic Resource Allocation for Big-Data Applications. IEEE Trans. Software Eng. (early access).
- Luciano Baresi, Danilo Filgueira Mendonca, Martin Garriga, Sam Guinea, Giovanni Quattrocchi: A Unified Model for the Mobile-Edge-Cloud Continuum. ACM Transactions on Internet Technology. 9(2) art. 29, April 2019
- Luciano Baresi, Giovanni Denaro, Giovanni Quattrocchi: Symbolic Execution-driven Extraction of the Parallel Execution Plans of Spark Applications. In Proceedings of the European Software Engineering Conference and International Symposium on the Foundations of Software Engineering, 246-256, August 2019.
- Luciano Baresi, Angelo Morzenti, Alfredo Motta, Mohammad Mehdi Pourhashem, Matteo Rossi: A Logic-based Approach for the Verification of UML Timed Models. ACM Transactions on Software Engineering and Methodology 26(2): art. 7:1-47, 2017.
- Luciano Baresi, Márcio Eduardo Delamaro, Paulo A. Nardi: Test Oracles for Simulink-like Models. Automated Software Engineering 24(2): 369-391, 2017.
- Luciano Baresi, Carlo Ghezzi, Xiaoxing Ma, Valerio Panzica La Manna: Efficient Dynamic Updates of Distributed Components Through Version Consistency. IEEE Transactions on Software Engineering 43(4): 340-358, 2017.
- Luciano Baresi, Sam Guinea, Alberto Leva, Giovanni Quattrocchi: A Discrete-time Feedback Controller for Containerized Cloud Applications. In Proceedings of the International Symposium on the Foundations of Software Engineering, 217-228, 2016.
- Luciano Baresi, Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi: Efficient Scalable Verification of LTL Specifications. In Proceedings of the 37th International Conference on Software Engineering, 711-721, 2015.
- Luciano Baresi, Carlo Ghezzi, Luca Mottola: Loupe: Verifying Publish-Subscribe Architectures with a Magnifying Lens. IEEE Transactions on Software Engineering 37(2): 228-246, 2011.

- Luciano Baresi, Sam Guinea: Self-Supervising BPEL Processes. *IEEE Transactions on Software Engineering* 37(2): 247-263, 2011.

## Journal articles

- Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi, Luciano Baresi: On How Bit-Vector Logic Can Help Verify LTL-based Specifications. *IEEE Trans. Software Eng.* (to appear)
- Clément Quinton, Michael Vierhauser, Rick Rabiser, Luciano Baresi, Paul Grünbacher, Christian Schumayer: Evolution in Dynamic Software Product Lines. *Journal of Software: Evolution and Process*, to appear.
- Luciano Baresi, William G. Griswold, Grace A. Lewis, Marco Autili, Ivano Malavolta, Christine Julien: Trends and Challenges for Software Engineering in the Mobile Domain. *IEEE Software* (to appear)
- Christos Tsigkanos, Martin Garriga, Luciano Baresi, Carlo Ghezzi: Cloud Deployment Tradeoffs for the Analysis of Spatially Distributed Systems of Internet-of-Things. *ACM Trans. Internet Techn.* 20(2): 17:1-17:23 (2020)
- Luciano Baresi, Alberto Leva, Giovanni Quattrocchi: Fine-Grained Dynamic Resource Allocation for Big-Data Applications. *IEEE Trans. Software Eng.* (early access)
- Luciano Baresi, Danilo Filgueira Mendonça, Martin Garriga, Sam Guinea, Giovanni Quattrocchi: A Unified Model for the Mobile-Edge-Cloud Continuum. *ACM Trans. Internet Techn.* 19(2): 29:1-29:21 (2019)
- Konstantin Rubinov, Luciano Baresi: What Are We Missing When Testing Our Android Apps? *IEEE Computer* 51(4): 60-68 (2018)
- Giovanni Meroni, Luciano Baresi, Marco Montali, Pierluigi Plebani: Multi-party business process compliance monitoring through IoT-enabled artifacts. *Inf. Syst.* 73: 61-78 (2018)
- Luciano Baresi, Márcio Eduardo Delamaro, Paulo Augusto Nardi: Test oracles for simulink-like models. *Autom. Softw. Eng.* 24(2): 369-391 (2017)
- Rick Rabiser, Sam Guinea, Michael Vierhauser, Luciano Baresi, Paul Grünbacher: A comparison framework for runtime monitoring approaches. *J. Syst. Softw.* 125: 309-321 (2017)
- Luciano Baresi, Angelo Morzenti, Alfredo Motta, Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi: A Logic-Based Approach for the Verification of UML Timed Models. *ACM Trans. Softw. Eng. Methodol.* 26(2): 7:1-7:47 (2017)
- Luciano Baresi, Carlo Ghezzi, Xiaoxing Ma, Valerio Panzica La Manna: Efficient Dynamic Updates of Distributed Components Through Version Consistency. *IEEE Trans. Software Eng.* 43(4): 340-358 (2017)
- Danilo Filgueira Mendonça, Genaína Nunes Rodrigues, Raian Ali, Vander Alves, Luciano Baresi: GODA: A goal-oriented requirements engineering framework for runtime dependability analysis. *Inf. Softw. Technol.* 80: 245-264 (2016)
- Luciano Baresi, Matteo Miraz, Pierluigi Plebani: A distributed architecture for efficient Web service discovery. *Service Oriented Computing and Applications* 10(1): 1-17 (2016)
- Luciano Baresi, Gundula Blohm, Dimitrios S. Kolovos, Nicholas Drivalos Matragkas, Alfredo Motta, Richard F. Paige, Alek Radjenovic, Matteo Rossi: Formal verification and validation of embedded systems: the UML-based MADES approach. *Software and Systems Modeling* 14(1): 343-363 (2015)
- Luciano Baresi, Carlo Ghezzi: A journey through SMScom: self-managing situational computing. *Comput. Sci. Res. Dev.* 28(4): 267-277 (2013)
- Yu Zhou, Luciano Baresi, Matteo Rossi: Towards a Formal Semantics for UML/MARTE State Machines Based on Hierarchical Timed Automata. *J. Comput. Sci. Technol.* 28(1): 188-202 (2013)
- Luciano Baresi, Sam Guinea, Liliana Pasquale: Service-Oriented Dynamic Software Product Lines. *IEEE Computer* 45(10): 42-48 (2012)
- Luciano Baresi, Angelo Morzenti, Alfredo Motta, Matteo Rossi: A logic-based semantics for the verification of multi-diagram UML models. *ACM SIGSOFT Software Engineering Notes* 37(4): 1-8 (2012)
- Danilo Ardagna, Luciano Baresi, Sara Comai, Marco Comuzzi, Barbara Pernici: A Service-Based Framework for Flexible Business Processes. *IEEE Software* 28(2): 61-67 (2011)
- Luciano Baresi, Carlo Ghezzi, Luca Mottola: Loupe: Verifying Publish-Subscribe Architectures with a Magnifying Lens. *IEEE Trans. Software Eng.* 37(2): 228-246 (2011)
- Luciano Baresi, Sam Guinea: Self-Supervising BPEL Processes. *IEEE Trans. Software Eng.* 37(2): 247-263 (2011)
- Luciano Baresi, Sam Guinea, Olivier Nano, George Spanoudakis: Comprehensive Monitoring of BPEL Processes. *IEEE Internet Comput.* 14(3): 50-57 (2010)

- Vahid Rafe, Adel Torkaman Rahmani, Luciano Baresi, Paola Spoletini: Towards automated verification of layered graph transformation specifications. *IET Softw.* 3(4): 276-291 (2009)
- Luciano Baresi, Carlo Ghezzi, Andrea Mocci, Mattia Monga: Using Graph Transformation Systems to Specify and Verify Data Abstractions. *ECEASST* 10 (2008)
- Luciano Baresi, Vahid Rafe, Adel Torkaman Rahmani, Paola Spoletini: An Efficient Solution for Model Checking Graph Transformation Systems. *Electron. Notes Theor. Comput. Sci.* 213(1): 3-21 (2008)
- Luciano Baresi, Domenico Bianculli, Carlo Ghezzi, Sam Guinea, Paola Spoletini: Validation of web service compositions. *IET Softw.* 1(6): 219-232 (2007)
- Luciano Baresi, Elisabetta Di Nitto, Carlo Ghezzi, Sam Guinea: A framework for the deployment of adaptable web service compositions. *Service Oriented Computing and Applications* 1(1): 75-91 (2007)
- Luciano Baresi, Sandro Morasca: Three empirical studies on estimating the design effort of Web applications. *ACM Trans. Softw. Eng. Methodol.* 16(4): 15 (2007)
- Luciano Baresi, Elisabetta Di Nitto, Carlo Ghezzi: Toward Open-World Software: Issue and Challenges. *IEEE Computer* 39(10): 36-43 (2006)
- Luciano Baresi, Andrea Maurino, Stefano Modafferi: Towards Distributed BPEL Orchestrations. *ECEASST* 3 (2006)
- Luciano Baresi, Mauro Pezzè: An Introduction to Software Testing. *Electron. Notes Theor. Comput. Sci.* 148(1): 89-111 (2006)
- Luciano Baresi, Reiko Heckel, Sebastian Thöne, Dániel Varró: Style-based modeling and refinement of service-oriented architectures. *Software and Systems Modeling* 5(2): 187-207 (2006)
- Luciano Baresi, Michal Young: Toward Translating Design Constraints to Run-Time Assertions. *Electron. Notes Theor. Comput. Sci.* 116: 73-84 (2005)
- Luciano Baresi, Mauro Pezzè: Petri Nets as Semantic Domain for Diagram Notations. *Electron. Notes Theor. Comput. Sci.* 127(2): 29-44 (2005)
- Luciano Baresi, Mauro Pezzè: Formal interpreters for diagram notations. *ACM Trans. Softw. Eng. Methodol.* 14(1): 42-84 (2005)
- Luciano Baresi, Marco Mauri, Mauro Pezzè: PLCTools: Graph Transformation Meets PLC Design. *Electron. Notes Theor. Comput. Sci.* 72(2): 79 (2002)
- Luciano Baresi, Mauro Pezzè: Improving UML with Petri nets. *Electron. Notes Theor. Comput. Sci.* 44(4): 107-119 (2001)
- Luciano Baresi, Mauro Pezzè: Toward Formalizing Structured Analysis. *ACM Trans. Softw. Eng. Methodol.* 7(1): 80-107 (1998)
- Cristiana Bolchini, Luciano Baresi: Software methodologies in VHDL code analysis. *J. Syst. Archit.* 44(1): 3-21 (1997)
- Sergio Bandinelli, Luciano Baresi, Alfonso Fuggetta, Luigi Lavazza: Experiences in the Implementation of a Process-centered Software Engineering Environment Using Object-Oriented Technology. *TAPOS* 1(2): 115-131 (1995)

#### **Journal special issues**

- Luciano Baresi, Luca Mottola, Schahram Dustdar: Building Software for the Internet of Things. *IEEE Internet Comput.* 19(2): 6-8 (2015)
- Luciano Baresi, Hausi A. Müller: Introduction to the Special Section on Best Papers from SEAMS 2012. *ACM Trans. Auton. Adapt. Syst.* 8(4): 16:1 (2014)
- Luciano Baresi, Piero Fraternali, Geert-Jan Houben: Editorial. *J. Web Eng.* 8(1): 1-2 (2009)
- Luciano Baresi, Schahram Dustdar, Harald C. Gall, Maristella Matera: Special issue on ubiquitous mobile information and collaboration systems (UMICS). *Personal and Ubiquitous Computing* 9(5): 261-261 (2005)
- Luciano Baresi, Mauro Pezzè, Gabriele Taentzer: Introduction - Graph Transformation and Visual Modeling Techniques - GT-VMT 2001. *Electron. Notes Theor. Comput. Sci.* 50(3): 325-326 (2001)

#### **National journals**

- Luciano Baresi e Edoardo Vannutelli. L'Ipod e l'autismo infantile. *e-HealthCare* - n. 26, 100-102, september/october 2013 (in italian).
- Luciano Baresi, Stefania Carmeli, Antonello Monti, and Mauro Pezzè. La norma IEC1131-3: Un Approccio Formale. *Automazione e Strumentazione*, 139-145, May 1999 (in italian).

- Luciano Baresi, Stefania Carmeli, Antonello Monti, and Mauro Pezzè. Un Approccio Formale ed Eterogeneo per la Progettazione di Sistemi Ibridi. Automazione e Strumentazione, 107-114, December 1997 (in italian).

### Books

- Luciano Baresi and E. Di Nitto (edited by). Test and Analysis of Web Services. Springer. September 2007.
- Luciano Baresi, Luigi Lavazza, and Massimiliano Piaciamore. Dall'idea al codice con UML 2. Pearson Education Italia. June 2006. In Italian.

### Exercise books

- Luciano Baresi, Marco Brambilla, Cinzia Cappiello, and Pierluigi Plebani. EUCIP --- Esercitazioni. Tecniche nuove. October 2005. In Italian.
- Luciano Baresi, Chiara Francalanci, Fabio Schreiber, and Letizia Tanca. Progettazione Integrata di dati e funzioni --- Esercizi svolti e commentati con i Modelli Entità-Relazioni, Data Flow e Unified Modeling Language (UML). Esculapio editore. September 2003. In Italian.

### Conference and workshop papers

- Luciano Baresi and Giovanni Quattrocchi: COCOS: a Scalable Architecture for Containerized Heterogeneous Systems. ICSA 2020, to appear.
- Luciano Baresi, Danilo Filgueira Mendonça: Towards a Serverless Platform for Edge Computing. ICFC 2019: 1-10
- Luciano Baresi, Danilo Filgueira Mendonça, Giovanni Quattrocchi: PAPS: A Framework for Decentralized Self-management at the Edge. ICSOC 2019: 508-522
- Luciano Baresi, Giovanni Denaro, Giovanni Quattrocchi: Big-Data Applications as Self-Adaptive Systems of Systems. ISSRE Workshops 2019: 155-162
- Luciano Baresi, Giovanni Denaro, Giovanni Quattrocchi: Symbolic execution-driven extraction of the parallel execution plans of Spark applications. ESEC/SIGSOFT FSE 2019: 246-256
- Luciano Baresi, Giovanni Quattrocchi: Towards Vertically Scalable Spark Applications. Euro-Par Workshops 2018: 106-118
- Luciano Baresi, Anita Imani, Cristina Frà, Massimo Valla: LIQDROID: towards seamlessly distributed Android applications. MOBILESoft@ICSE 2018: 166-175
- Luciano Baresi, Mersedeh Sadeghi, Massimo Valla: TDeX: A Description Model for Heterogeneous Smart Devices and GUI Generation. iThings/GreenCom/CPSCoM/SmartData 2018: 97-104
- Francesco Marconi, Giovanni Quattrocchi, Luciano Baresi, Marcello M. Bersani, Matteo Rossi: On the Timed Analysis of Big-Data Applications. NFM 2018: 315-332
- Luciano Baresi, Martin Garriga, Alan De Renzis: Microservices Identification Through Interface Analysis. ESOC 2017: 19-33
- Luciano Baresi, Danilo Filgueira Mendonça, Martin Garriga: Empowering Low-Latency Applications Through a Serverless Edge Computing Architecture. ESOC 2017: 196-210
- Luciano Baresi, Naser Derakhshan, Sam Guinea, Francesco Arenella: MAGNET: A middleware for the proximal interaction of devices based on Wi-Fi direct. ICC 2017: 1-7
- Andreas Christoforou, Martin Garriga, Andreas S. Andreou, Luciano Baresi: Supporting the Decision of Migrating to Microservices Through Multi-layer Fuzzy Cognitive Maps. ICSOC 2017: 471-480
- Luciano Baresi, Giovanni Meroni, Pierluigi Plebani: On Handling Business Process Anomalies through Artifact-based Modeling. CAiSE Forum 2016: 9-16
- Luciano Baresi, Giovanni Meroni, Pierluigi Plebani: Using the Guard-Stage-Milestone Notation for Monitoring BPMN-based Processes. BMMDS/EMMSAD 2016: 18-33
- Amir Molzam Sharifloo, Andreas Metzger, Clément Quinton, Luciano Baresi, Klaus Pohl: Learning and evolution in dynamic software product lines. SEAMS@ICSE 2016: 158-164
- Luciano Baresi, Sam Guinea, Danilo Filgueira Mendonça: A3Droid: A framework for developing distributed crowdsensing. PerCom Workshops 2016: 1-6
- Luciano Baresi, Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi: How bit-vector logic can help improve the verification of LTL specifications over infinite domains. SAC 2016: 1666-1673
- Luciano Baresi, Sam Guinea, Alberto Leva, Giovanni Quattrocchi: A discrete-time feedback controller for containerized cloud applications. SIGSOFT FSE 2016: 217-228



- Luciano Baresi, Sam Guinea, Giovanni Quattrocchi, Damian Andrew Tamburri: MicroCloud: A Container-Based Solution for Efficient Resource Management in the Cloud. SmartCloud 2016: 218-223
- Luciano Baresi, Naser Derakhshan, Sam Guinea: WiDiSi: A Wi-Fi direct simulator. WCNC 2016: 1-7
- Luciano Baresi, Giovanni Meroni, Pierluigi Plebani: A GSM-based Approach for Monitoring Cross-Organization Business Processes Using Smart Objects. Business Process Management Workshops 2015: 389-400
- Luciano Baresi, Adnan Shahzada: An Architecture-Centric Approach for Dynamic Smart Spaces. ECSA 2015: 277-284
- Luciano Baresi, Clément Quinton: Dynamically Evolving the Structural Variability of Dynamic Software Product Lines. SEAMS@ICSE 2015: 57-63
- Luciano Baresi, Laurent-Walter Goix, Sam Guinea, Valerio Panzica La Manna, Jacopo Aliprandi, Dario Archetti: SPF: A Middleware for Social Interaction in Mobile Proximity Environments. ICSE (2) 2015: 79-88
- Luciano Baresi, Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi: Efficient Scalable Verification of LTL Specifications. ICSE (1) 2015: 711-721
- Luciano Baresi, Sam Guinea, Giovanni Quattrocchi: Distributed Coordinated Adaptation of Cloud-Based Applications. SEFM Workshops 2015: 215-227
- Luciano Baresi, Sam Guinea: Event-Based Monitoring of Service-Oriented Smart Spaces (Invited Paper). SOCA 2015: 123-130
- Clément Quinton, Rick Rabiser, Michael Vierhauser, Paul Grünbacher, Luciano Baresi: Evolution in dynamic software product lines: challenges and perspectives. SPLC 2015: 126-130
- Filippo Seracini, Massimiliano Menarini, Ingolf Krueger, Luciano Baresi, Sam Guinea, Giovanni Quattrocchi: A Comprehensive Resource Management Solution for Web-based Systems. ICAC 2014: 233-239
- Luciano Baresi, Mohammad Mehdi Pourhashem Kallehbasti, Matteo Rossi: Flexible modular formalization of UML sequence diagrams. FormaliSE 2014: 10-16
- Luciano Baresi, Sam Guinea, Adnan Shahzada: Short paper: Harmonizing heterogeneous components in SeSaMe. WF-IoT 2014: 197-198
- Luciano Baresi, Sam Guinea, Valerio Panzica La Manna: Consistent Runtime Evolution of Service-Based Business Processes. WICSA 2014: 77-86
- Luciano Baresi, Sam Guinea, Adnan Shahzada: SeSaMe: Towards a Semantic Self Adaptive Middleware for Smart Spaces. EMAS@AAMAS 2013: 1-18
- Luciano Baresi, Annapaola Marconi, Marco Pistore, Adina Sirbu: Corrective Evolution of Adaptable Process Models. BMMDS/EMMSAD 2013: 214-229
- Bradley R. Schmerl, Jesper Andersson, Thomas Vogel, Myra B. Cohen, Cecília M. F. Rubira, Yuriy Brun, Alessandra Gorla, Franco Zambonelli, Luciano Baresi: Challenges in Composing and Decomposing Assurances for Self-Adaptive Systems. Software Engineering for Self-Adaptive Systems 2013: 64-89
- Luciano Baresi, Sam Guinea: Event-Based Multi-level Service Monitoring. ICWS 2013: 83-90
- Luciano Baresi, Sam Guinea, Panteha Saeedi: Self-managing Overlays for Infrastructure-less Networks. SASO 2013: 81-90
- Alek Radjenovic, Nikolas Drivalos Matragkas, Richard F. Paige, Matteo Rossi, Alfredo Motta, Luciano Baresi, Dimitrios S. Kolovos: MADES: A Tool Chain for Automated Verification of UML Models of Embedded Systems. ECMFA 2012: 340-351
- Luciano Baresi, Gianni Ferretti, Alberto Leva, Matteo Rossi: Flexible logic-based Co-simulation of Modelica models. INDIN 2012: 635-640
- Luciano Baresi, Nikolaos Georgantas, Kristof Hamann, Valérie Issarny, Winfried Lamersdorf, Andreas Metzger, Barbara Pernici: Emerging Research Themes in Services-Oriented Systems. SRII Global Conference 2012: 333-342
- Luciano Baresi, Matteo Miraz: A Component-Oriented Metamodel for the Modernization of Software Applications. ICECCS 2011: 179-187
- Luciano Baresi, Sam Guinea: A3: self-adaptation capabilities through groups and coordination. ISEC 2011: 11-20
- Xiaoxing Ma, Luciano Baresi, Carlo Ghezzi, Valerio Panzica La Manna, Jian Lu: Version-consistent dynamic reconfiguration of component-based distributed systems. SIGSOFT FSE 2011: 245-255
- Asli Zengin, Annapaola Marconi, Luciano Baresi, Marco Pistore: CLAM: Managing cross-layer adaptation in service-based systems. SOCA 2011: 1-8

- Luciano Baresi, Sam Guinea: A-3: An Architectural Style for Coordinating Distributed Components. WICSA 2011: 161-170
- Matteo Miraz, Pier Luca Lanzi, Luciano Baresi: Improving evolutionary testing by means of efficiency enhancement techniques. IEEE Congress on Evolutionary Computation 2010: 1-8
- Rogério de Lemos, Holger Giese, Hausi A. Müller, Mary Shaw, Jesper Andersson, Marin Litoiu, Bradley R. Schmerl, Gabriel Tamura, Norha M. Villegas, Thomas Vogel, Danny Weyns, Luciano Baresi, Basil Becker, Nelly Bencomo, Yuriy Brun, Bojan Cukic, Ronald J. Desmarais, Schahram Dustdar, Gregor Engels, Kurt Geihs, Karl M. Göschka, Alessandra Gorla, Vincenzo Grassi, Paola Inverardi, Gabor Karsai, Jeff Kramer, Antónia Lopes, Jeff Magee, Sam Malek, Serge Mankovski, Raffaella Mirandola, John Mylopoulos, Oscar Nierstrasz, Mauro Pezzè, Christian Prehofer, Wilhelm Schäfer, Richard D. Schlichting, Dennis B. Smith, João Pedro Sousa, Ladan Tahvildari, Kenny Wong, Jochen Wuttke: Software Engineering for Self-Adaptive Systems: A Second Research Roadmap. Software Engineering for Self-Adaptive Systems 2010: 1-32
- Jesper Andersson, Luciano Baresi, Nelly Bencomo, Rogério de Lemos, Alessandra Gorla, Paola Inverardi, Thomas Vogel: Software Engineering Processes for Self-Adaptive Systems. Software Engineering for Self-Adaptive Systems 2010: 51-75
- Luciano Baresi, Mauro Caporuscio, Carlo Ghezzi, Sam Guinea: Model-Driven Management of Services. ECOWS 2010: 147-154
- Luciano Baresi, Angelo Morzenti, Alfredo Motta, Matteo Rossi: Towards the UML-Based Formal Verification of Timed Systems. FMCO 2010: 267-286
- Schahram Dustdar, Christoph Dorn, Fei Li, Luciano Baresi, Giacomo Cabri, Cesare Pautasso, Franco Zambonelli: A roadmap towards sustainable self-aware service systems. SEAMS 2010: 10-19
- Luca Mottola, Thiemo Voigt, Fredrik Österlind, Joakim Eriksson, Luciano Baresi, Carlo Ghezzi: Anquiro: enabling efficient static verification of sensor network software. SESENA@ICSE 2010: 32-37
- Luciano Baresi, Liliana Pasquale: Live goals for adaptive service compositions. SEAMS 2010: 114-123
- Luciano Baresi, Pier Luca Lanzi, Matteo Miraz: TestFul: An Evolutionary Test Approach for Java. ICST 2010: 185-194
- Luciano Baresi, Liliana Pasquale: Adaptive Goals for Self-Adaptive Service Compositions. ICWS 2010: 353-360
- Luciano Baresi, Angelo Morzenti, Alfredo Motta, Matteo Rossi: From Interaction Overview Diagrams to Temporal Logic. MoDELS Workshops 2010: 90-104
- Luciano Baresi, Liliana Pasquale, Paola Spoletini: Fuzzy Goals for Requirements-Driven Adaptation. RE 2010: 125-134
- Luciano Baresi, Sam Guinea: Consumer Mashups with Mashlight. ServiceWave 2010: 112-123
- Luciano Baresi, Carlo Ghezzi: The disappearing boundary between development-time and run-time. FoSER 2010: 17-22
- Wolfgang Theilmann, Luciano Baresi: Multi-level SLAs for Harmonized Management in the Future Internet. Future Internet Assembly 2009: 193-202
- Luciano Baresi, Domenico Bianculli, Sam Guinea, Paola Spoletini: Keep It Small, Keep It Real: Efficient Run-Time Verification of Web Service Compositions. FMOODS/FORTE 2009: 26-40
- Luciano Baresi, Sam Guinea, Marco Pistore, Michele Trainotti: Dynamo + Astro: An Integrated Approach for BPEL Monitoring. ICWS 2009: 230-237
- Luciano Baresi, Matteo Miraz, Pierluigi Plebani: A Flexible and Semantic-Aware Publication Infrastructure for Web Services. CAISE 2008: 435-449
- Luciano Baresi, Sam Guinea, Giordano Tamburrelli: Towards decentralized self-adaptive component-based systems. SEAMS 2008: 57-64
- Luciano Baresi, Sam Guinea, Liliana Pasquale: Integrated and Composable Supervision of BPEL Processes. ICSOC 2008: 614-619
- Luciano Baresi, Sam Guinea: A dynamic and reactive approach to the supervision of BPEL processes. ISEC 2008: 39-48
- Luciano Baresi, Sam Guinea, Liliana Pasquale: Towards a unified framework for the monitoring and recovery of BPEL processes. TAV-WEB 2008: 15-19
- Luciano Baresi, Sam Guinea, Raman Kazhamiakin, Marco Pistore: An Integrated Approach for the Run-Time Monitoring of BPEL Orchestrations. ServiceWave 2008: 1-12

- Luciano Baresi, Giordano Tamburrelli: Loose Compositions for Autonomic Systems. *Software Composition 2008*: 165-172
- Luciano Baresi, Sam Guinea, Pierluigi Plebani: Policies and Aspects for the Supervision of BPEL Processes. *CAISE 2007*: 340-354
- Fei He, Luciano Baresi, Carlo Ghezzi, Paola Spoletini: Formal Analysis of Publish-Subscribe Systems by Probabilistic Timed Automata. *FORTE 2007*: 247-262
- Luciano Baresi, Carlo Ghezzi, Luca Mottola: On Accurate Automatic Verification of Publish-Subscribe Architectures. *ICSE 2007*: 199-208
- K. S. May Chan, Judith Bishop, Johan Steyn, Luciano Baresi, Sam Guinea: A Fault Taxonomy for Web Service Composition. *ICSOC Workshops 2007*: 363-375
- Luciano Baresi, Domenico Bianculli, Carlo Ghezzi, Sam Guinea, Paola Spoletini: A Timed Extension of WSCoL. *ICWS 2007*: 663-670
- Luciano Baresi, Andrea Maurino, Stefano Modafferi: Distributed BPEL Processes. *SEKE 2007*: 692-697
- Luciano Baresi, Sam Guinea, Liliana Pasquale: Self-healing BPEL processes with Dynamo and the JBoss rule engine. *ESSPE 2007*: 11-20
- Luciano Baresi, Daniele Braga, Marco Comuzzi, Filippo Pacifici, Pierluigi Plebani: A service-based infrastructure for advanced logistics. *IW-SOSWE 2007*: 47-53
- Luciano Baresi, Giorgio Gerosa, Carlo Ghezzi, Luca Mottola: Playing with time in publish-subscribe using a domain-specific model checker. *SAVCBS 2007*: 55-62
- Luciano Baresi, Paolo Beretta, Roberto Fraccapani, Carlo Ghezzi, Filippo Pacifici: Towards a Model-driven Approach to Develop Applications based on Physical Active Objects. *APSEC 2006*: 173-182
- Luciano Baresi, Carlo Ghezzi, Luca Mottola: Towards Fine-Grained Automated Verification of Publish-Subscribe Architectures. *FORTE 2006*: 131-135
- Luciano Baresi, Paola Spoletini: On the Use of Alloy to Analyze Graph Transformation Systems. *ICGT 2006*: 306-320
- Luciano Baresi, Luca Mainetti: W2000 meets J2ME for the Fast Prototyping of Mobile Web Applications. *IASTED Conf. on Software Engineering 2006*: 59-64
- Luciano Baresi, Sam Guinea, Marco Plebani: Business Process Monitoring for Dependability. *WADS 2006*: 337-361
- Luciano Baresi, Matteo Miraz: A Distributed Approach for the Federation of Heterogeneous Registries. *ICSOC 2006*: 240-251
- Luciano Baresi, Karsten Ehrig, Reiko Heckel: Verification of Model Transformations: A Case Study with BPEL. *TGC 2006*: 183-199
- Luciano Baresi, Mauro Pezzè: From Graph Transformation to Software Engineering and Back. *Formal Methods in Software and Systems Modeling 2005*: 24-37
- Luciano Baresi, Carlo Ghezzi, Antonio Miele, Matteo Miraz, Andrea Naggi, Filippo Pacifici: Hybrid service-oriented architectures: a case-study in the automotive domain. *SEM 2005*: 62-68
- Luciano Baresi, Sam Guinea: Towards Dynamic Monitoring of WS-BPEL Processes. *ICSOC 2005*: 269-282
- Luciano Baresi, Piero Fraternali, Massimo Tisi, Sandro Morasca: Towards Model-Driven Testing of a Web Application Generator. *ICWE 2005*: 75-86
- Luciano Baresi, Elisa Quintarelli: Graph transformation to infer schemata from XML documents. *SAC 2005*: 642-646
- Luciano Baresi, Sebastiano Colazzo, Luca Mainetti: First experiences on constraining consistency and adaptivity of W2000 models. *SAC 2005*: 1674-1678
- Luciano Baresi, Sam Guinea, Pierluigi Plebani: WS-Policy for Service Monitoring. *TES 2005*: 72-83
- Luciano Baresi, Carlo Ghezzi: Validation of Component and Service Federations in Automotive Software Applications. *ASWSD 2004*: 57-73
- Luciano Baresi, Carlo Ghezzi, Sam Guinea: Smart monitors for composed services. *ICSOC 2004*: 193-202
- Luciano Baresi, Andrea Maurino, Stefano Modafferi: Workflow Partitioning in Mobile Information Systems. *MOBIS 2004*: 93-106
- Luciano Baresi, Reiko Heckel, Sebastian Thöne, Dániel Varró: Style-Based Refinement of Dynamic Software Architectures. *WICSA 2004*: 155-166

- Luciano Baresi, Sandro Morasca, Paolo Paolini: Estimating the Design Effort of Web Applications. IEEE METRICS 2003: 62-72
- Luciano Baresi, Reiko Heckel, Sebastian Thöne, Dániel Varró: Modeling and validation of service-oriented architectures: application vs. style. ESEC / SIGSOFT FSE 2003: 68-77
- Luciano Baresi, Devis Bianchini, Valeria De Antonellis, Maria Grazia Fugini, Barbara Pernici, Pierluigi Plebani: Context-Aware Composition of E-services. TES 2003: 28-41
- Luciano Baresi, Mauro Pezzè: A Toolbox for Automating Visual Software Engineering. FASE 2002: 189-202
- Luciano Baresi, Franca Garzotto, Luca Mainetti, Paolo Paolini: Meta-modeling Techniques Meet Web Application Design Tools. FASE 2002: 294-307
- Luciano Baresi, Reiko Heckel: Tutorial Introduction to Graph Transformation: A Software Engineering Perspective. ICGT 2002: 402-429
- Luciano Baresi, Giovanni Denaro, Luca Mainetti, Paolo Paolini: Assertions to better specify the amazon bug. SEKE 2002: 585-592
- Luciano Baresi, Sandro Morasca, Paolo Paolini: An Empirical Study on the Design Effort of Web Applications. WISE 2002: 345-354
- Luciano Baresi, Mauro Pezzè: On Formalizing UML with High-Level Petri Nets. Concurrent Object-Oriented Programming and Petri Nets 2001: 276-304
- Luciano Baresi, Franca Garzotto, Paolo Paolini: Extending UML for Modeling Web Applications. HICSS 2001
- Franca Garzotto, Paolo Paolini, Luciano Baresi: Supporting Reusable Web Design with HDM-Edit. HICSS 2001
- Luciano Baresi, Franca Garzotto, Paolo Paolini: From Web Sites to Web Applications: New Issues for Conceptual Modeling. ER (Workshops) 2000: 89-100
- Luciano Baresi, Marco Mauri, Antonello Monti, Mauro Pezzè: PLCTOOLS: design, formal validation, and code generation for programmable controllers. SMC 2000: 2437-2442
- Luciano Baresi, Mauro Pezzè: A Formal Definition of Structured Analysis with Programmable Graph Grammars. AGTIVE 1999: 193-208
- Luciano Baresi, Fabio Casati, Silvana Castano, Maria Grazia Fugini, Isabelle Mirbel, Barbara Pernici: WIDE workflow development methodology. WACC 1999: 19-28
- Luciano Baresi, Manuele Di Paola, Antonio Gargiulo, Mauro Pezzè: LEMMA: a language for easy medical models analysis. CBMS 1997: 244-249
- Luciano Baresi, Alessandro Orso, Mauro Pezzè: Introducing Formal Specification Methods in Industrial Practice. ICSE 1997: 56-66
- Donatella Sciuto, Luciano Baresi, Cristiana Bolchini: Software methodologies for VHDL code static analysis based on flow graphs. EURO-DAC 1996: 406-411
- Alejandro Alonso, Hanne Christensen, Luciano Baresi, Marko Heikkinen: IDERS: an integrated environment for the development of hard real-time systems. RTS 1995: 4-10
- Luciano Baresi, Alessandro Orso, Mauro Pezzè: Customizable notations for kernel formalisms. ICECCS 1995: 43-52
- Sergio Bandinelli, Luciano Baresi, Alfonso Fuggetta, Luigi Lavazza: Requirements and Early Experiences in the Implementation of the SPADE Repository using Object-Oriented Technology. ISOTAS 1993: 511-528
- Sergio Bandinelli, Luciano Baresi, Alfonso Fuggetta, Luigi Lavazza: Requirements and Early Experiences in the Implementation of the SPADE Repository. ISPW 1993: 30-32

#### **Demos, posters, and journal first abstracts**

- Luciano Baresi, Alberto Leva, Giovanni Quattrocchi: Fine-Grained Dynamic Resource Allocation for Big-Data Applications. ICSE 2020 (journal first), to appear.
- Rick Rabiser, Sam Guinea, Michael Vierhauser, Luciano Baresi, Paul Grünbacher: A comparison framework for runtime monitoring approaches. SANER 2018 (journal first): 472
- Luciano Baresi, Claudio Di Ciccio, Jan Mendling, Giovanni Meroni, Pierluigi Plebani: mArtifact: An Artifact-driven Process Monitoring Platform. BPM (Demos) 2017
- Rogério de Lemos, David Garlan, Carlo Ghezzi, Holger Giese, Jesper Andersson, Marin Litoiu, Bradley R. Schmerl, Danny Weyns, Luciano Baresi, Nelly Bencomo, Yuriy Brun, Javier Cámara, Radu Calinescu, Myra B. Cohen, Alessandra Gorla, Vincenzo Grassi, Lars Grunske, Paola Inverardi, Jean-Marc Jézéquel, Sam Malek, Raffaella Mirandola, Marco Mori, Hausi A. Müller, Romain Rouvoy, Cecília M. F. Rubira, Éric Rutten, Mary Shaw,

Giordano Tamburrelli, Gabriel Tamura, Norha M. Villegas, Thomas Vogel, Franco Zambonelli: Software Engineering for Self-Adaptive Systems: Research Challenges in the Provision of Assurances. *Software Engineering for Self-Adaptive Systems 2013*: 3-30

- Luciano Baresi, Gianluca Ripa, Liliana Pasquale: IRET: Requirements for service platforms. *RE 2013 (Demos)*: 336-337
- Steven Fraser, Luciano Baresi, Jane Cleland-Huang, Carlo A. Furia, Georges Gonthier, Paola Inverardi, Moshe Y. Vardi: A publication culture in software engineering (panel). *ESEC/SIGSOFT FSE 2013*: 19-23
- Luciano Baresi, Matteo Miraz: TestFul: automatic unit-test generation for Java classes. *ICSE (Demos) 2010*: 281-284
- Luciano Baresi, Sam Guinea: Mashups with Mashlight. *ICSOC 2010 (Demo)*: 711-712
- Matteo Miraz, Pier Luca Lanzi, Luciano Baresi: TestFul: using a hybrid evolutionary algorithm for testing stateful systems. *GECCO 2009 (Demos)*: 1947-1948
- Domenico Bianculli, Carlo Ghezzi, Paola Spoletini, Luciano Baresi, Sam Guinea: A Guided Tour through SAVVY-WS: A Methodology for Specifying and Validating Web Service Compositions. *Lipari Summer School 2007*: 131-160
- Luciano Baresi, Sam Guinea: Dynamo: Dynamic Monitoring of WS-BPEL Processes. *ICSOC 2005 (Demo)*: 478-483

### Parts in books or collections

- Luciano Baresi, Martin Garriga: Microservices: The Evolution and Extinction of Web Services? *Microservices, Science and Engineering 2020*: 3-28
- Luciano Baresi, Domenico Bianculli, Sam Guinea: Cloud-Based Systems Need Multi-Level Management. *Advanced Web Services 2014*: 579-603
- Luciano Baresi, Sam Guinea, Panteha Saeedi: Achieving Self-adaptation through Dynamic Group Management. *Assurances for Self-Adaptive Systems 2013*: 214-239
- Luciano Baresi, Liliana Pasquale: Adaptation Goals for Adaptive Service-Oriented Architectures. *Relating Software Requirements and Architectures 2011*: 161-181
- Luciano Baresi, Antonio Di Ferdinando, Antonio Manzalini, Franco Zambonelli: The CASCADAS Framework for Autonomic Communications. *Autonomic Communication 2010*: 147-168
- Raman Kazhamiakin, Salima Benbernou, Luciano Baresi, Pierluigi Plebani, Maïke Uhlig, Olivier Barais: Adaptation of Service-Based Systems. *S-CUBE Book 2010*: 117-156
- Luciano Baresi, Carlo Ghezzi, Sam Guinea: Towards Self-healing Composition of Services. *Contributions to Ubiquitous Computing 2007*: 27-46
- Luciano Baresi, Sebastiano Colazzo, Luca Mainetti, Sandro Morasca: W2000: A Modelling Notation for Complex Web Applications. *Web Engineering 2006*: 335-364

### Editorships

- Matteo Baldoni, Luciano Baresi, Mehdi Dastani: *Engineering Multi-Agent Systems - Third International Workshop, EMAS 2015, Revised, Selected, and Invited Papers. Lecture Notes in Computer Science 9318, Springer 2015*
- Luciano Baresi, Tim Menzies, Andreas Metzger, Thomas Zimmermann: *1st IEEE/ACM International Workshop on Big Data Software Engineering, BIGDSE 2015. IEEE Computer Society 2015*
- Bertrand Meyer, Luciano Baresi, Mira Mezini: *Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE'13. ACM 2013*
- Hausi A. Müller, Luciano Baresi: *7th International Symposium on Software Engineering for Adaptive and Self-Managing Systems, SEAMS 2012, IEEE Computer Society 2012*
- Luciano Baresi, Chi-Hung Chi, Jun Suzuki: *Service-Oriented Computing, 7th International Joint Conference, ICSOC-ServiceWave 2009. Lecture Notes in Computer Science 5900, 2009*
- Luciano Baresi, Piero Fraternali, Geert-Jan Houben: *Web Engineering, 7th International Conference, ICWE 2007. Lecture Notes in Computer Science 4607, Springer 2007*
- Luciano Baresi, Reiko Heckel: *Fundamental Approaches to Software Engineering, 9th International Conference, FASE 2006, Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2006. Lecture Notes in Computer Science 3922, Springer 2006*

- Luciano Baresi, Schahram Dustdar, Harald C. Gall, Maristella Matera: Ubiquitous Mobile Information and Collaboration Systems, UMICS 2004, Revised Selected Papers. Lecture Notes in Computer Science 3272, Springer 2005
- Giuseppe Santucci, Wolfgang Klas, Michela Bertolotto, Coral Calero, Luciano Baresi: 4th International Conference on Web Information Systems Engineering Workshops, WISE 2003 Workshops, IEEE Computer Society 2003.
- Luciano Baresi, Mike Hinchey, Mei Hwa Chen, and Shaoying Liu: IEEE Conference on Engineering Complex Computer Systems. IEEE Computer Society 2002.
- Luciano Baresi, Jean Jacques Lévy, Richard Mayr, Mauro Pezzè, Gabriele Taentzer, and Christos Zaroliagis: Satellite Workshops of the 28th International Colloquium on Automata, Languages, and Programming (ICALP), 2001. Electronic Notes in Theoretical Computer Science, volume 50.

## Others

- Luciano Baresi: Activity Diagrams. Encyclopedia of Database Systems (2nd ed.) 2018
- Sven Apel, Joanne M. Atlee, Luciano Baresi, Pamela Zave: Feature Interactions: The Next Generation (Dagstuhl Seminar 14281). Dagstuhl Reports 4(7): 1-24 (2014)
- Luciano Baresi, Andreas Rummler, Klaus Schmid: Customizing Service Platforms (Dagstuhl Seminar 13171). Dagstuhl Reports 3(4): 114-150 (2013)
- Rogério de Lemos, Holger Giese, Hausi A. Müller, Mary Shaw, Jesper Andersson, Luciano Baresi, Basil Becker, Nelly Bencomo, Yuriy Brun, Bojan Cukic, Ronald J. Desmarais, Schahram Dustdar, Gregor Engels, Kurt Geihs, Karl M. Göschka, Alessandra Gorla, Vincenzo Grassi, Paola Inverardi, Gabor Karsai, Jeff Kramer, Marin Litoiu, Antónia Lopes, Jeff Magee, Sam Malek, Serge Mankovskii, Raffaella Mirandola, John Mylopoulos, Oscar Nierstrasz, Mauro Pezzè, Christian Prehofer, Wilhelm Schäfer, Richard D. Schlichting, Bradley R. Schmerl, Dennis B. Smith, João Pedro Sousa, Gabriel Tamura, Ladan Tahvildari, Norha M. Villegas, Thomas Vogel, Danny Weyns, Kenny Wong, Jochen Wuttke:
- Software Engineering for Self-Adaptive Systems: A second Research Roadmap. Software Engineering for Self-Adaptive Systems 2010
- Luciano Baresi: Activity Diagrams. Encyclopedia of Database Systems 2009: 41-45

## National conferences and workshops

- Luciano Baresi, Debora Desideri, Matteo Melideo, Alberto Sillitti, and Giancarlo Succi. Servizi Web in Registri Distribuiti, Proceedings of XLV Congresso Annuale AICA, AICA, Milano, September 2007.
- Danilo Ardagna, Luciano Baresi, Sara Comai, Marco Comuzzi, Barbara Pernici, Massimiliano Pianciamore, and Simone Prandin. Una Piattaforma di Servizi Avanzata a Supporto di Distretti Cooperativi: il progetto DISCoRSO. Proceedings of ITAIS 2007. Venice, October 2007.
- Luciano Baresi, Stefania Carmeli, Antonello Monti, and Mauro Pezzè. PLC Programming Languages: A Formal Approach. Automation 98. ANIPLA. November 1998.
- Luciano Baresi, Stefania Carmeli, Antonello Monti, and Mauro Pezzè. Una Proposta di Metodologia Integrata di Specifica per il Controllo in Tempo Reale: il Caso degli Azionamenti Elettrici. Proceedings of Giornata di Studio ANIPLA: Progettazione del Software di Controllo per l'Automazione di Impianti, 11-22.

## Project-related publications

- Alessandra Bagnato, Andrey Sadovykh, Richard Paige, Dimitrios Kolovos, Luciano Baresi, Angelo Morzenti and Matteo Rossi: MADES: Embedded Systems Engineering Approach in the Avionics Domain. In Proceedings of the First Workshop on Hands-on Platforms and tools for model-based engineering of Embedded Systems, satellite event of 6th European Conference on Modelling Foundations and Applications, 93-98, 2010.
- Alessandra Bagnato, Luciano Baresi, Francisco Garijo, Jesús Gorroñoigoitia, Matteo Miraz, Juan Pavón Mestras, Giorgio Pezzuto, Luis Quijada, Andrey Sadovykh, Marco Serina, and Jan Vollmar: MOMOCS - MDE for the Modernization of Complex Systems. In Proceedings of Neptune days, Paris, 2008.
- SeCSE Team: Designing and Deploying Service-Centric Systems: The SeCSE Way. In Proceedings of Service Oriented Computing: a look at the Inside (SOC@Inside'07), satellite event of ICSOC'07, 2007.
- SeCSE Team: Towards Service-centric System Engineering. In Proceedings of e-Challenges 2005, 2005.
- UWA Consortium: Ubiquitous Web Applications. In Proceedings of e-2002, e-business and e-work, 2002.
- UWA Consortium: The UWA Approach to Modeling Ubiquitous Web Applications. In Proceedings of the 2002 IST Mobile & Wireless Telecommunications Summit., 2002.

- Goodstep Team: The GOODSTEP Project: General Object-Oriented Database for Software Engineering Processes. In Proceedings of the First Asia-Pacific Software Engineering Conference, 410-419, 1994.
- Goodstep Team: The GOODSTEP Project: General Object-Oriented Database for Software Engineering Processes. In Proceedings of the Workshop on the Interaction between Databases and Software Engineering Processes, satellite event of the 16th International Conference on Software Engineering, 1994.

### **Technical reports**

- Luciano Baresi and Michal Young. Test Oracles. Technical report, University of Oregon (USA), 2001.
- Luciano Baresi. Software Methodologies in VHDL Code Analysis. Technical report 96-10, Politecnico di Milano, 1996.
- Luciano Baresi Using Object-Oriented Databases in Software Engineering: An Overview of Five Products. Technical report 95-17, Politecnico di Milano, 1995.

### **Curated italian versions**

- Martin Fowler, UML Distilled 4/Ed. Pearson, 2010
- Andrew S. Tanenbaum, Modern Operating Systems 3/Ed. Pearson, 2009
- Harvey M. Deitel, Paul J. Deitel, Java How to Program 7/Ed. Pearson, 2008
- Andrew S. Tanenbaum, Maarten Van Steen, Distributed systems. Pearson, 2007
- Jim Conallen, Building Web Applications with UML 2/Ed. Pearson, 2003
- Eric Gamma, Richard Helm, Ralph Johnson, John Vlissides, Design Patterns: Elements of Reusable Object-Oriented Software. Pearson, 2002