

# Curriculum vitae

*Giovanna Guerrini*

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## General Information

### Personal Data

*Date and place of birth:* Genova, October 8, 1969  
*Citizenship:* Italian  
*Personal address:* via Vernazza 30D/7, 16131 - Genova, Italy

### Education

- PhD in Computer Science, University of Genova, 1998.  
  
Thesis' title: *An Active and Deductive Object-Oriented Data Model* [78]  
Thesis' advisor: Prof. Elisa Bertino  
External reviewers: Prof. Stefano Ceri and Prof. Susan Urban
- Laurea degree cum laude in Computer Science, University of Genova, 1993.

### Academic Positions

*December 2005-current* Associate Professor

Department of Computer and Information Sciences, University of Genova.

*November 2001-November 2005* Associate Professor

Department of Computer Science, University of Pisa.

*January 1996-October 2001* Assistant Professor

Department of Computer and Information Sciences, University of Genova.

## Research Activity

The research activity falls in the database field, mainly in the areas of object-oriented databases, temporal databases, semi-structured and XML data handling. The main research interests have specifically been:

- the integration of the object and deductive paradigm in the database context,
- formalization and extensions of object-oriented data models: Objects with multiple most specific classes, object migration, composite objects, object views,
- execution models and semantics of object active databases, trigger inheritance,

and, more recently:

- (spatio-)temporal extensions of the object-oriented data model supporting multiple granularities (detail levels),
- XML document approximate retrieval and flexible querying,
- XML schema evolution, incremental document validation and adaptation,
- adaptively approximate query processing.

## Supervised PhD Theses

- *Extending the ODMG Object Model with Temporal and Active Capabilities*, Dr. Isabella Merlo, December 2000 (co-supervised with Prof. Elisa Bertino). PhD in Computer Science, University of Genova.
- *A Structural Similarity Measure for XML Documents: Theory and Applications*, Dr. Marco Mesiti, December 2002 (co-supervised with Prof. Elisa Bertino). PhD in Computer Science, University of Genova.
- *Spatio-temporal Multigranularity in an Object Data Model*, Dr. Elena Camossi, December 2004 (co-supervised with Dr. Michela Bertolotto). PhD in Computer Science, University of Milano.

## Current PhD Students

Federico Cavalieri, PhD program in Computer Science, University of Genova. Research topic: XML schema and document updates.

## Research Projects

Principal investigator of the following research projects:

- *Innovative Functionalities for Object-Oriented Databases* funded in the context of the national program “Young researchers”, 2000.
- *Multi-granular spatio-temporal databases* international cooperation program between University of Pisa and University College Dublin, funded by Enterprise Ireland, 2002.

Member of the University of Genova unit of the projects:

- National project *SPADA - Multiresolution Models for Spatial Data Representation* (2001-2002).
- EU IST Project *PAST - exPeriencing Archaeology across Space and Time* (2002-2003).
- Italy-Spain Integrated Action *CombIning corpus-bAased and knowledge-based methods for wOrd SENse diSambiguatiOn* (2003-2005).
- National project *Visualpedia: multimedia object sharing through a Wiki for disable students* funded in the context of the program “Novel technologies and disabilities”, (2008-2009).

## Research Visits

*August 2000* Visit to Prof. Shashi Gadia, *Department of Computer Science, Iowa State University, Ames, Iowa*, in the context of a cooperation concerning the definition of spatio-temporal data model and query language.

*March 2001* Visit to Dr. Michela Bertolotto, *Department of Computer Science, University College Dublin, Dublin, Ireland*, in the context of a cooperation concerning multigranular spatio-temporal data models.

*September 2006* Visit to the *Departamento de Sistemas Informaticos y Computacion, Universidad Politecnica de Valencia, Valencia, Spain*, in the context of the program Teaching Staff Mobility Socrates-Erasmus.

*October 2006* Visit to Prof. Rafael Berlanga Llavori, *Department d'Enginyeria i Ciencia de la Computacion, Universitat Jaume I, Castellon, Spain*, in the context of a cooperation with him and Dr. Ismael Sanz Blasco concerning XML document approximate retrieval.

*June 2008* Visit to Dr. Emmanuel Waller *LRI, Université Paris Sud - Paris XI*, Paris, France, in the context of a cooperation with him and Dr. Dario Colazzo concerning XML document and schema updates.

*October 2010* Visit to Dr. Alvaro A. Fernandes *Information Management Group, School of Computer Science, University of Manchester*, Manchester, UK, in the context of a cooperation on adaptively approximate query processing.

## Visits from Foreign Researchers

*July-August 2002* Visit of Dr. Michela Bertolotto, Department of Computer Science, University College Dublin, Dublin, Ireland, in the context of a cooperation concerning multigranular spatio-temporal data models.

*November 2004-January 2005* Visit of Dr. Ismael Sanz Blasco, Departament d'Enginyeria i Ciència de la Computació, Universitat Jaume I, Castellon, Spain, in the context of a cooperation concerning XML document approximate retrieval.

*February 2008* Visit of Dr. Alvaro A. A. Fernandes and Dr. Paolo Missier, Information Management Group, School of Computer Science, University of Manchester, in the context of a cooperation concerning adaptive query processing in presence of data quality constraints.

*September 2008 and September 2009* Visits of Dr. Ismael Sanz Blasco, Departament d'Enginyeria i Ciència de la Computació, Universitat Jaume I, Castellon, Spain, in the context of a cooperation concerning XML document approximate retrieval.

## Conference Organization

- Organizing Chair of the *17th Italian Symposium on Advanced Database Systems*, SEBD 2009, Camogli, June 21-24, 2009.
- Conference Chair of the *23rd European Conference on Object-Oriented Programming*, ECOOP 2009, Genova, July 6-10, 2009.
- Responsible of the bid for hosting the *16th International Conference on Extending Database Technology* joint with *16th International Conference on Database Theory* EDBT/ICDT 2013, accepted by the EDBT Foundation. The conference will be held in Genova from 18 to 22 March, 2013.
- Member of the organizing committee of the following workshops and symposia:
  - *First ECOOP Workshop on Object-Oriented Databases*, Lisbon (Portugal), June 1999.
  - *ECOOP 2000 Symposium on Objects and Databases*, Sophia-Antipolis (France), June 2000.
  - *EDBT'04 Workshop on Database Technologies for Handling XML Information on the Web* dataX 2004, Heraklion (Greece), March 2004.
  - *EDBT'06 Workshop on Database Technologies for Handling XML Information on the Web* dataX 2006, Munich (Germany), March 2006.
  - *EDBT'08 Workshop on Database Technologies for Handling XML Information on the Web* dataX 2008, Nantes (France), March 2008.
  - *EDBT/ICDT 2010 Workshop on Updates in XML*, Lausanne (Switzerland), March 2010.

## Review Board Membership

Member of the editorial board of:

- *Proceedings of the Very Large DataBases Endowment VLDB Journal Track*, since August 2008.

## Program Committee Membership

Member of the program committee of the following events:

- *European Conference on Object-Oriented Programming* - ECOOP: 2000, 2004
- *International Conference on Information and Knowledge Management* - CIKM: 2000
- *International Conference on Object-Oriented Programming Systems, Languages, and Applications* - OOPSLA: 2001, 2003
- *International Conference on Extending Database Technology* - EDBT: 2004
- *International XML Database Symposium* - XSym: 2005, 2006, 2009, 2010
- *Joint Asia-Pacific Web Conference and International Conference on Web-Age Information Management* - APWeb/WAIM: 2007, 2009
- *Asian Pacific Web Conference* - APWeb: 2008, 2010
- *Web Age Information Management Conference* - WAIM: 2008, 2010
- *International Conference on Database and Expert Systems Applications* - DEXA: 2009, 2010
- *International Conference on Object Databases* - ICOODB: 2009, 2010
- *East-European Conference on Advances in Databases and Information Systems* - ADBIS: 2010
- *Australasian Database Conference* - ADC: 2011
- *British National Conference on Databases* - BNCOD: 2011
- *OOPSLA '01 Workshop on Objects, XML and Databases*
- *EDBT '02 Workshop on XML-Based Data Management*
- *ER'04 Workshop on Conceptual Modeling for Geographic Information Systems CoMoGIS 2004*
- *PAKDD'06 Workshop on Knowledge Discovery from XML Documents*
- *CAiSE'06 International Workshop on Data Integration and the Semantic Web DISWeb'06*
- *VLDB'07 PhD Workshop*
- *ECOOP Workshop on The Marriage of XML and Object-Oriented Database Technologies and Their Future XOODB 2009*

## PhD Thesis Reviewer

External reviewer of the following PhD theses:

- *gridXML: An XML based Language for Information Dissemination in Distributed Systems*, Dr. Mohammad Sadegh Astaneh, Università di Milano, 2003.
- *A General Framework for Web Content Filtering*, Dr. Andrea Perego, Università di Milano, 2006.
- *Flexible Techniques for Heterogeneous XML Data Retrieval*, Dr. Ismael Sanz Blasco, Universitat Jaume I, Castellon, 2007.

President of the PhD defense committee of Ismael Sanz Blasco, 2007, and member of the PhD defense committee of the PhD in Computer Science, Università di Genova, 2010.

## Further Review Activity

- Regular referee for the journal *Data and Knowledge Engineering*, Elsevier.
- Referee for many international journals, recently: *ACM Transactions on Database Systems*, *IEEE Transactions on Knowledge and Data Engineering*, *Information Systems*, *VLDB Journal*, *Acta Informatica*, *Journal of Intelligent Information Systems*, *The Computer Journal*, *Journal of Systems Architecture*, *Distributed and Parallel Databases*, *Concurrency and Computation*, *International Journal on Information Technology*.
- Project proposal referee for NSF, Enterprise Ireland, EPSRC.

## Teaching Activity

### Academic Courses (5 years degrees)

Course	Degree	University	Credits	Academic years
Data Bases	Computer Science	Genova		1997-98   2002-03
Advanced Data Bases	Computer Science	Genova		1997-98   1999-00
Data Bases: Recent Advancements	Computer Science	Genova		2000-01
Data Structures Programming Lab	Applied Computer Science	Pisa	4	2001-02
System Programming Lab	Applied Computer Science	Pisa	6	2001-02
Data Base Lab	Applied Computer Science	Pisa	9	2002-03
Data Bases	Applied Computer Science	Pisa	6	2003-04   2007-08
Data Base Design Lab	Applied Computer Science	Pisa	3	2003-04   2007-08
Data Base System Implementation	Computer Science	Genova	6	2003-04   2008-09
Data Bases	Computer Science	Genova	9	2006-07, 2008-09
New Generation Data Models	Computer Science	Genova	6	2007-08
Decision Support Systems	Computer Science	Genova	6	2009-10
Software Engineering	Computer Science	Genova	12	2009-10, 2010-2011
Advanced Data Management	Computer Science	Genova	9	2010-2011

### PhD Courses

- In July 1995, teaching assistantship in the course *Active Databases: Systems and Applications* Prof. Stefano Ceri *Seventh International School for Computer Science Researchers - Databases and Knowledge Bases*, Lipari, Italy.
- In June-July 2008, *Data Base* module in the course *Programming Languages and Databases* PhD in Computer Science, University of Genova.
- In September 2010, *Query Processing on Web Data* module in the course *Advanced Web Applications: Semantic and Data Processing Issues* PhD in Computer Science, University of Genova.

### Master (Post-Lauream) Courses

- *Object-oriented Database* course, Advanced Computer Science post-lauream Master, Scuola Universitaria Professionale della Svizzera Italiana (Lugano, Switzerland) 1999 and 2001.
- *Enterprise Information Systems* course, post-lauream Master “Logistics and Transportation”, Scuola Nazionale dei Trasporti e Logistica, La Spezia, 2006.
- *Data Bases* and *Business Intellingence* courses, post-lauream Master “Advanced Technologies for Intelligent Integrated Systems”, Università di Genova, 2008.

## Publications

### Edited Volumes

- [1] K. Dittrich, G. Guerrini, I. Merlo, M. Oliva, E. Rodriguez, editors, *Objects and Databases - International Symposium, Sophia Antipolis, France, June 2000, Revised Papers*, Lecture Notes in Computer Science 1944, Springer-Verlag.
- [2] M. Mesiti, G. Guerrini, I. Sanz, B. Catania, editors, *Post-proceedings of the Third International Workshop on Database Technologies for Handling XML Information on the Web*, ACM, 2008.
- [3] V. De Antonellis, S. Castano, B. Catania, G. Guerrini, editors, *Proceedings of the 17th Italian Symposium on Advanced Database Systems*, Camogli, Italy, June 2009.
- [4] G. Guerrini, M. Mesiti, E. Waller, editors, *Proceedings of the EDBT/ICDT 2010 Workshop on Updates in XML* Lausanne, Switzerland, March 2010, ACM Digital Library.

### Edited Journal Special Issues

- [5] G. Guerrini, I. Merlo, E. Ferrari, editors, “Special Issue on Object-Oriented Databases”, *Concurrency and Computation: Practice and Experience* Vol. 13 No. 11, Settembre 2001, John Wiley & Sons.

### International Journals

- [6] E. Bertino, G. Guerrini, D. Montesi. Towards Deductive Object Databases. *Theory and Practice of Object Systems*, 1(1): 19–39, 1995. Special Issue: Selected ECOOP ‘94 Papers. John Wiley & Sons.
- [7] E. Bertino, E. Ferrari, G. Guerrini. T\_Chimera: A Temporal Object-Oriented Data Model. *Theory and Practice of Object Systems*, 3(2):103–125, 1997. John Wiley & Sons.
- [8] G. Guerrini, E. Bertino, B. Catania, J. Garcia-Molina. A Formal Model of Views for Object-Oriented Database Systems. *Theory and Practice of Object Systems*, 3(3):157–183, 1997. John Wiley & Sons.
- [9] G. Guerrini, D. Montesi. Design and Implementation of Chimera Active Rule Language. *Data & Knowledge Engineering*, 24(1):39-67, 1997. Elsevier Science.
- [10] G. Guerrini, E. Bertino, R. Bal. A Formal Definition of the Chimera Object-Oriented Data Model. *Journal of Intelligent Information Systems*, 11(1):5-40, 1998. Kluwer Academic Publishers.
- [11] E. Bertino, E. Ferrari, G. Guerrini. Navigational Accesses in a Temporal Object Model. *IEEE Transactions on Knowledge and Data Engineering*, 10(4):656-665, 1998. IEEE Computer Society Press.
- [12] E. Bertino, G. Guerrini, I. Merlo. Trigger Inheritance and Overriding in Active Object Database Systems. *IEEE Transactions on Knowledge and Data Engineering*, 12(4):588–608, 2000. IEEE Computer Society Press.
- [13] E. Bertino, G. Guerrini, I. Merlo. Triggers in Java-based Databases. *L’Objet*, 6(3):387-398, 2000. Special Issue: Selected Papers from *OOPSLA’99 Workshop on Java and Databases: Persistence Options*. Hermès.
- [14] E. Bertino, G. Guerrini, I. Merlo. A Set-Oriented Method Definition Language for Object Databases and Its Semantics. *Concurrency and Computation: Practice and Experience* 15(13):1275-1335, 2003. John Wiley & Sons.

- [15] E. Bertino, E. Ferrari, G. Guerrini, I. Merlo. T-ODMG: An ODMG Compliant Temporal Object Model Supporting Multiple Granularity Management. *Information Systems*, 28(8):885-927, 2003. Elsevier Science.
- [16] E. Bertino, G. Guerrini, I. Merlo. Extending the ODMG Object Model with Triggers. *IEEE Transactions on Knowledge and Data Engineering*, 16(2): 170-188, 2004. IEEE Computer Society Press.
- [17] E. Camossi, E. Bertino, G. Guerrini, M. Mesiti. Evolution Specification of Multigranular Temporal Objects. *Journal of Logic and Computation*, 14(1): 23-50, 2004. Oxford University Press.
- [18] E. Bertino, G. Guerrini, M. Mesiti. A Matching Algorithm for Measuring the Structural Similarity between an XML Document and a DTD. *Information Systems*, 29(1): 23-46, 2004. Elsevier Science.
- [19] M. Mesiti, B. Catania, G. Guerrini, A. B. Chaudhri. EDBT04 Workshop on Database Technologies for Handling XML Information on the Web. *SIGMOD Record*, 33(2): 132-134, 2004. ACM Press.
- [20] E. Bertino, G. Guerrini, M. Mesiti. Measuring the structural similarity among XML documents and DTDs. *Journal of Intelligent Information Systems*, 30(1): 55-92, 2008. Kluwer Academic Publishers.
- [21] I. Sanz, M. Mesiti, G. Guerrini, R. Berlanga. Fragment-based Approximate Retrieval in Highly Heterogeneous XML Collections. *Data & Knowledge Engineering*, 64(1): 266-293, 2008. Elsevier Science.
- [22] M. Benedikt, D. Florescu, P. Gardner, G. Guerrini, M. Mesiti, E. Waller. Report on the EDBT/ICDT 2010 Workshop on Updates in XML. *SIGMOD Record*, 39(1), 2010. ACM Press.

#### Chapters in International Volumes

- [23] E. Bertino, G. Guerrini, L. Rusca. Object Evolution in Object Databases. In B. Franhöfer e R. Pareschi, editors, *Dynamic Worlds*, pagg. 219-246. Kluwer Academic Publishers, 1999.
- [24] E. Bertino, G. Guerrini. Object-Oriented Databases. In J. Webster, editor, *Wiley Encyclopedia of Electrical and Electronics Engineering*, volume 15, pagg. 42-62. John Wiley & Sons, 1999.
- [25] G. Guerrini, I. Merlo, E. Ferrari, G. Kappel, A. de Miguel. Object-Oriented Databases. In A. Moreira and S. Demeyer, editors, *Object-Oriented Technology - ECOOP'99 Workshop Reader*, Lecture Notes in Computer Science 1743, pagg. 207-221, 1999.
- [26] E. Bertino, G. Guerrini. OODBMS History. In A. Chaudhri and R. Zicari, editors, *Succeeding with Object Databases*, pagg. 3-26. John Wiley & Sons, 2000.
- [27] E. Bertino, G. Guerrini, D. Montesi. Inheritance in Deductive Object Databases. In G. Saake, K. Schwarz, C. Türker, editors, *Transactions and Database Dynamics - Selected papers from Eighth International Workshop on Foundations of Models and Languages for Data and Objects*, Dagstuhl, 1999. Lecture Notes in Computer Science 1773, pagg. 67-90, Springer-Verlag, 2000.
- [28] E. Bertino, G. Guerrini, I. Merlo. Exception Handling in Object-Oriented Databases. In A. Romanovsky, C. Dony, J. Lindskov Knudsen and A. Tripathi, editors, *Advances in Exception Handling Techniques*. Lecture Notes in Computer Science 2022, pagg. 234-250, Springer-Verlag, 2001.
- [29] G. Guerrini, M. Mesiti, E. Bertino. Structural Similarity Measures in Sources of XML Documents. In J. Darmont and O. Boussaid, editors, *Processing and Managing Complex Data for Decision Support*, pagg. 247-279, IGI Publishing, 2006.
- [30] G. Guerrini, M. Mesiti, I. Sanz. An Overview of Similarity Measures for Clustering XML Documents. In A. Vakali and G. Pallis, editors, *Web Data Management Practices: Emerging Techniques and Technologies*, pagg. 56-78, IGI Publishing, 2007.

- [31] G. Guerrini, V. Mascardi, M. Mesiti. A Semantic Information Retrieval Advertisement and Policy Based System for a P2P Network. In G. Moro et al., editors, *Databases, Information Systems, and Peer-to-Peer Computing - Revised Selected Papers from DBISP2P 05/06 International Workshops*. Lecture Notes in Computer Science 4125, pagg. 147-154, Springer, 2007.
- [32] E. Bertino, G. Guerrini. Object-Oriented Databases. In B. Wah, editor, *Wiley Encyclopedia of Computer Science and Engineering*, John Wiley & Sons, 2008.
- [33] G. Guerrini, M. Mesiti. XML Schema Evolution and Versioning: Current Approaches and Future Trends. In E. Pardede, editor, *Open and Novel Issues in XML Database Applications*. IGI Publishing, 2009.
- [34] D. Colazzo, G. Guerrini, M. Mesiti, B. Oliboni, E. Waller. Document and Schema XML Updates. In Changqing Li and Tok Wang Ling, editors, *Advanced Applications and Structures in XML Processing: Label Stream, Semantics Utilization and Data Query Technologies*. IGI Publishing, 2010.
- [35] B. Catania, G. Guerrini. Towards Adaptively Approximated Search in Distributed Architectures. In L. Jain and A. Vakali, editors, *Web Data Management Trails*. Springer, 2010.

### International Conferences and Symposia

- [36] E. Bertino, B. Catania, G. Guerrini. An Overview of LOL: a Deductive Language for Object Bases. In A. Makinouchi, editor, *Proc. International Symposium on Next Generation Database Systems and Their Applications*, pagg. 69-76, 1993.
- [37] E. Bertino, B. Catania, G. Guerrini. Logic Programming and Databases: Overview of Transaction Optimization in Constrained Datalog. In *Proc. Second World Congress on Expert Systems*, 1994.
- [38] E. Bertino, B. Catania, G. Guerrini. LOL: A Deductive Object Language for Databases. In M. Tanik, W. Rossak and D. Cooke, editors, *Proc. ECTE Computers in Engineering Symposium*, pagg. 237-246, 1994.
- [39] E. Bertino, B. Catania, G. Guerrini, D. Montesi. Transaction Optimization in Rule Databases. In J. Widom and S. Chakravarthy, editors, *Proc. Fourth International IEEE Workshop on Research Issues in Data Engineering - Active Database Systems*, pagg. 137-145, 1994.
- [40] E. Bertino, B. Catania, G. Guerrini, D. Montesi. Static Analysis of Transactional Intensional Databases. In U. Geske and D. Seipel, editors, *Proc. Second ICLP Workshop on Deductive Databases - Deductive Databases and Logic Programming*, pagg. 57-73, 1994.
- [41] E. Bertino, G. Guerrini, D. Montesi. Deductive Object Databases. In M. Tokoro and R. Pareschi, editors, *Proc. Eighth European Conference on Object-Oriented Programming*, Lecture Notes in Computer Science 821, pagg. 213-235, 1994.
- [42] E. Bertino, B. Catania, G. Guerrini, M. Martelli, D. Montesi. A Bottom-Up Interpreter for a Database Language with Updates and Transactions. In M. Alpuente, R. Barbuti and I. Ramos, editors, *Proc. 1994 Joint Conference on Declarative Programming*, Vol II, pagg. 206-220, 1994.
- [43] E. Bertino, G. Guerrini, D. Montesi. Generic Methods in Deductive Object Databases. In D. Patel, Y. Sun and S. Patel, editors, *Proc. International Conference on Object-Oriented Information Systems*, pagg. 210-214, 1994. Springer-Verlag.
- [44] E. Bertino, G. Guerrini. Objects with Multiple Most Specific Classes. In W. Olthoff, editor, *Proc. Ninth European Conference on Object-Oriented Programming*, Lecture Notes in Computer Science 952, pagg. 102-126, 1995.
- [45] S. Castangia, G. Guerrini, D. Montesi, G. Rodriguez. Design and Implementation for the Active Rule Language of Chimera. In N. Revell and A. M. Tjoa, editors, *Proc. Sixth International Conference and Workshop on Database and Expert Systems Applications*, pagg. 45-54, 1995.

- [46] E. Bertino, E. Ferrari, G. Guerrini. A Formal Temporal Object-Oriented Data Model. In P. Apers, M. Bouzeghoub and G. Gardarin, editors, *Proc. Fifth International Conference on Extending Database Technology*, Lecture Notes in Computer Science 1057, pagg. 342-356, 1996.
- [47] E. Bertino, G. Guerrini. Viewpoints in Object Database Systems. In L. Vidal, A. Finkelstein, G. Spanoudakis and A. Wolf, editors, *Joint Proc. of the SIGSOFT '96 Workshops*, pagg. 289-293, 1996. ACM Press.
- [48] E. Bertino, G. Guerrini, I. Merlo. Trigger Inheritance and Overriding in Active Object Database Systems. In F. Bry, R. Ramakrishnan and K. Ramamohanarao, editors, *Proc. Fifth International Conference on Deductive and Object-Oriented Databases*, Lecture Notes in Computer Science 1341, pagg. 193-210, 1997.
- [49] E. Bertino, E. Ferrari, G. Guerrini. An Approach to Model and Query Event-Based Temporal Data. In L. Khatib and R. Morris, editors, *Proc. Fifth International Workshop on Temporal Representation and Reasoning*, pagg. 122-131, 1998. IEEE Computer Society Press.
- [50] E. Bertino, E. Ferrari, G. Guerrini, I. Merlo. Extending the ODMG Object Model with Time. In E. Jul, editor, *Proc. Twelfth European Conference on Object-Oriented Programming*, Lecture Notes in Computer Science 1445, pagg. 41-66, 1998.
- [51] E. Bertino, G. Guerrini. Extending the ODMG Object Model with Composite Objects. In *ACM SIGPLAN Notices 33(10) - Proc. Thirteenth International Conference on Object-Oriented Programming: Systems, Languages, and Applications*, pagg. 259-270, 1998.
- [52] I. Merlo, E. Bertino, E. Ferrari, G. Guerrini. A Temporal Object-Oriented Data Model with Multiple Granularities. In C. Dixon and M. Fisher, editors, *Proc. Sixth International Workshop on Temporal Representation and Reasoning*, pagg. 73-81, 1999. IEEE Computer Society Press.
- [53] E. Bertino, G. Guerrini, I. Merlo, M. Mesiti. An Approach to Classify Semi-Structured Objects. In R. Guerraoui, editor, *Proc. Thirteenth European Conference on Object-Oriented Programming*, Lecture Notes in Computer Science 1628, pagg. 416-440, 1999.
- [54] I. Merlo, E. Bertino, E. Ferrari, S. Gadia, G. Guerrini. Querying Multiple Temporal Granularity Data. In S. Goodwin and A. Trudel, editors, *Proc. of the Seventh International Workshop on Temporal Representation and Reasoning*, pagg. 103-114, 2000. IEEE Computer Society Press.
- [55] E. Bertino, E. Ferrari, G. Guerrini, I. Merlo. Navigating Through Multiple Temporal Granularity Objects. In C. Bettini and A. Montanari, editors, *Proc. of the Eighth International Symposium on Temporal Representation and Reasoning*, pagg. 147-155, 2001. IEEE Computer Society Press.
- [56] E. Bertino, T. Cheng, S. Gadia, G. Guerrini. A Linguistic Framework for Querying Dimensional Data. In C. Bettini and A. Montanari, editors, *Proc. of the Eighth International Symposium on Temporal Representation and Reasoning*, pagg. 156-163, 2001. IEEE Computer Society Press.
- [57] E. Bertino, G. Guerrini, M. Mesiti, L. Tositto. Evolving a Set of DTDs according to a Dynamic Set of XML Documents. In A. Chaudhri, R. Unland, C. Djeraba, W. Lindner, editors, *Proc. of the EDBT 2002 XML-Based Data Management Workshop*, 2002. Lecture Notes in Computer Science 2490, pagg. 45-66.
- [58] E. Bertino, G. Guerrini, M. Mesiti. Matching an XML Document against a Set of DTDs. In M.-S. Hacid, Z. W. Ras, D. A. Zighed, Y. Kodratoff, editors, *Proc. of the Thirteenth International Symposium on Methodologies for Intelligent Systems*, Lecture Notes in Computer Science 2366, pagg. 412-422, 2002.
- [59] E. Camossi, E. Bertino, G. Guerrini, M. Mesiti. Evolution Specification of Multigranular Temporal Objects. In *Proc. of the Ninth International Symposium on Temporal Representation and Reasoning*, pagg. 78-85, 2002. IEEE Computer Society Press.

- [60] E. Camossi, M. Bertolotto, E. Bertino, G. Guerrini. A Multigranular Spatiotemporal Data Model. In *Proc. of the Eleventh ACM International Symposium on Advances in Geographic Information Systems*, pagg. 94-101, 2003. ACM Press.
- [61] D. Buscaldi, G. Guerrini, M. Mesiti, P. Rosso. Tag Semantics for the Retrieval of XML Documents. In *Proc. First International Symposium on Information and Communication Technologies*, pagg. 273-278, 2003. ACM International Conference Proceeding Series.
- [62] M. Mesiti, E. Bertino, G. Guerrini. An Abstraction-Based Approach to Measuring the Structural Similarity between two Unordered XML Documents. In *Proc. First International Symposium on Information and Communication Technologies*, pagg. 316-321, 2003. ACM International Conference Proceeding Series.
- [63] E. Bertino, G. Guerrini, M. Mesiti. DiXeminator: A Profile-Based Selective Dissemination System for XML Documents. In *Current Trends in Database Technology - EDBT 2004 Workshop Revised Selected Papers*, 2004. Lecture Notes in Computer Science 3268, pagg. 578-587.
- [64] E. Bertino, E. Camossi, G. Guerrini. Access to Multigranular Temporal Objects. In *Proc. of the Sixth International Conference on Flexible Query Answering Systems*, 2004. Lecture Notes in Computer Science 3055, pagg. 320-333.
- [65] I. Sanz, M. Mesiti, G. Guerrini, R. Berlanga. Approximate Subtree Identification in Heterogeneous XML Documents Collections. In *Proc. International XML Database Symposium*, 2005. Lecture Notes in Computer Science 3671, pagg. 192-206.
- [66] M. Mesiti, V. Mascardi, G. Guerrini. A Customizable Semantic-Based P2P System. In *Proc. IADIS International Conference WWW/Internet*, 2005, Volume 1, pagg. 403-410.
- [67] G. Guerrini, M. Mesiti, D. Rossi. Impact of XML Schema Evolution on Valid Documents. In *Proc. Seventh ACM Workshop on Web Information and Data Management*, pagg. 39-44, 2005. ACM Press.
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Genova, September 20, 2010