

Vita, Work, and Publications of

Luigi Palopoli

1 Personal data

Place and date of birth: October 25, 1964, Cosenza, Italy

Nationality: Italian

Current Position: Professor of Computer Engineering, DEIS Department, University of Calabria, Italy and Research Associate at the ICAR Institute of the National Research Council of Italy

Working address: DEIS Department, University of Calabria, via P. Bucci, Cubo 41/C, 87036 Rende, Italy. Phone: ++39 0984 494749, fax: ++39 0984 494713, mobile: ++39 320 423 8262

Email: palopoli@deis.unical.it

2 Short Bio, Education, Positions

- *October 25, 1964:* Birth in Cosenza, Italy
- *July 1982:* High School Diploma, Liceo Scientifico “E. Fermi”, Cosenza
- *December 1986:* Laurea Degree in Computer Science (Summa cum laude), University of Pisa, Italy
- *June 1986 - December 1987:* FSE grant recipient at CRAI, a research and development computer science consortium at Rende, Italy
- *Jan 1988 - June 1991:* Member of the Research Division at CRAI, Rende, Italy
- *July 1991 - October 1998:* Assistant Professor of Computer Engineering, DEIS department, University of Calabria, Rende, Italy
- *August 1992 - July 1993:* Visiting scholar, Computer Science Department, UCLA, Los Angeles, USA
- *July and August 1997:* Visiting researcher, AT&T Laboratories, Florham Park (NJ), USA

- *November 1998 - September 2000*: Associate Professor of Computer Engineering, DEIS department, University of Calabria, Rende, Italy
- *October 2000 - October 2003*: Professor of Computer Engineering, DIMET department, University “Mediterranea”, Reggio Calabria, Italy
- *March 2002 - Oct 2003*: Chair of the PhD program in Computer, Biomedical and Telecommunication Engineering, University “Mediterranea”, Reggio Calabria, Italy
- *Since May 2002*: Co-founder and member of the Board of Directors of Exeura, a Spin-off company of University of Calabria operating in the area of knowledge management (“in prorogatio” until to the presentation of the 2012 company balance).
- *2003*: Director of the DIMET department, University “Mediterranea”, Reggio Calabria, Italy
- *2003*: Director of CESIAT (the Center for Computing and Telecommunication Resources), University “Mediterranea”, Reggio Calabria, Italy
- *Since November 2003*: Professor of Computer Engineering, DEIS department, University of Calabria, Rende, Italy
- *Since April 2004*: Research Associate with the ICAR Institute of the National Research Council of Italy
- *From November 2005 to December 2008*: Chair of the School of Computer Engineering (Bachelor and Master programmes), University of Calabria, Rende, Italy
- *From November 2008 to July 2012*: Vice-Dean of the School of Engineering, University of Calabria, Rende, Italy.
- *From March 2009 to November 2012*: Chair of the PhD program in Computer and Systems Engineering, University of Calabria, Rende, Italy.
- *Various periods*: Short term visiting scholar at the Computer Science Department, University of California, Los Angeles (1994, 1997), at the Institute for Information Systems, Technical University of Wien (2007), at the Computing Laboratory, Oxford University (2007 and 2009)

3 Fellowships

- *1986*: FSE fellowship for young computer scientists (18 months stipend attached)

- *1992*: National Research Council of Italy (CNR) fellowship for international mobility
- *1997*: NATO senior researcher fellowship (awarded by CNR)
- *2009*: Temporary SCR fellow of University College, Oxford (Trinity Term)

4 Research themes

A list of main research subjects that have been pursued through years follows:

- Artificial intelligence and Knowledge representation:
 - Computational aspects of game theory
 - Agent systems
 - Anomaly detection in knowledge bases
 - Tools for ontology design and applications
 - Formal aspects of knowledge representation languages
- Database theory and applications:
 - Database query and update languages
 - Query optimization for distributed databases
 - Integration of data sources, cooperative information systems and data warehouses design
 - Theoretical aspects of data mining
- Bioinformatics:
 - Tools for secondary and tertiary protein structure prediction
 - Motif extraction in biological structures
 - Biological networks querying and analysis

5 Teaching

5.1 Academic Teaching

A list of the teaching activities follows (all cited courses are requested in students' curricula, but those ones marked with an asterisk):

- *1990-91*: Several seminars given within the course of *Computer Programming* (for undergraduate students in Computer Engineering, Management Engineering, and Mechanical Engineering), University of Calabria;

- 1991-92: Several seminars given within the courses of *Computer Programming* (for undergraduate students in Computer Engineering, Management Engineering, and Mechanical Engineering), University of Calabria.
- 1993-94
 - Several seminars given within the course of *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria;
 - Several seminars given within the course of *Computer Programming* (for undergraduate students in Computer Engineering, Management Engineering, and Mechanical Engineering), University of Calabria.
- 1994-95
 - *Software Engineering*, undergraduate Computer Engineering curriculum, University of Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria;
 - Several seminars given within the courses of *Languages and Compilers* (for students in Computer Engineering), University of Calabria.
- 1995-96
 - *Computer Programming*, undergraduate Chemical and Mechanical Engineering curricula, University of Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria.
- 1996-97
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria.
- 1997-98, 1998-99, 1999-2000
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria;
 - *Computer Architectures*, graduate Electronic Engineering curriculum, University “Mediterranea” of Reggio Calabria.
- 2000-01

- *Computer Programming*, undergraduate Electronic and Telecommunication Engineering curricula , University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, undergraduate Electronic and Telecommunication Engineering curriculum, University “Mediterranea” of Reggio Calabria;
 - *Introduction to Computers(*)*, undergraduate Agriculture Science curriculum, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria.
- *2001-02*
 - *Computer Programming*, undergraduate Electronic and Telecommunication Engineering curricula, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, undergraduate Electronic and Telecommunication Engineering curriculum, University “Mediterranea” of Reggio Calabria;
 - *Computer Applications Lab(*)*, undergraduate Agriculture Science curriculum, University “Mediterranea” of Reggio Calabria;
 - *Information systems*, Graduate School in Environmental Engineering, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria.
 - *2002-03*
 - *Computer Programming*, undergraduate Electronic and Telecommunication Engineering curricula, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, undergraduate Electronic and Telecommunication Engineering curriculum, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures II*, graduate Electronic and Telecommunication Engineering curriculum, University “Mediterranea” of Reggio Calabria;
 - *Computer Networks*, graduate Electronic and Telecommunication Engineering curriculum, University “Mediterranea” of Reggio Calabria;
 - *Computer Architectures*, graduate Computer Engineering curriculum, University of Calabria.

- 2003-04
 - *Computer Architectures*, undergraduate Computer Engineering curriculum, University of Calabria.
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Programming languages*, graduate Mechanical Engineering curriculum, University of Calabria;
 - *Networked computing systems(*)*, graduate Management Engineering curriculum, University of Calabria.
- 2004-05
 - *Computer Architectures*, undergraduate Computer Engineering curriculum, University of Calabria.
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Programming languages*, graduate Mechanical Engineering curriculum, University of Calabria;
 - *Networked computing systems(*)*, graduate Management Engineering curriculum, University of Calabria.
- 2005-06
 - *Computer Architectures*, undergraduate Computer Engineering curriculum, University of Calabria.
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Programming languages*, graduate Mechanical Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.
- 2006-07
 - *Computer Architectures*, undergraduate Computer Engineering curriculum, University of Calabria;
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Programming languages*, graduate Mechanical Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.

- 2007-08
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.
- 2008-09
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures*, undergraduate Computer Engineering curriculum, University of Calabria;
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.
- 2009-10
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures II*, graduate Computer Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.
- 2010-11
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures I*, undergraduate Computer Engineering curriculum, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.
- 2011-12
 - *Computer Programming*, undergraduate Engineering curricula (unified course for all Engineering specialities), University of Calabria;
 - *Computer Architectures I*, undergraduate Computer Engineering and Electronic Engineering curricula, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.

- 2011-12
 - *Computer Architectures I*, undergraduate Computer Engineering and Electronic Engineering curricula, University of Calabria;
 - *Artificial Intelligence*, graduate Computer Engineering curriculum, University of Calabria.

In September 2008 Luigi Palopoli gave an invited course on *Data warehousing and OLAP for knowledge extraction* at the National GII Doctoral School in Computer Engineering on *Boosting Services and Information in Adaptive Networked Enterprises*, in L'Aquila, Italy.

5.2 Supervision of Master Theses and Doctoral Dissertations

Since 1993, supervision of approximately 100 master theses and 8 Ph.D. theses. Currently, Luigi Palopoli acts as the supervisor of Alessia Amelio and Ofelia Leone (PhD curriculum in Systems and Computer Engineering). The following is a list of past supervised Ph.D. theses.

- Domenico Ursino: Extraction and exploitation of intentional knowledge from heterogeneous information sources, 1999 (This thesis was subsequently published as a monograph volume by Springer Verlag as the Lecture Note in Computer Science n. 2282, 2002; D. Ursino is currently Associate Professor of Computer Engineering at DIMET Dept., University “Mediterranea” of Reggio Calabria, Italy)
- Giovambattista Ianni: Data and web mining techniques: formal characterization and applications, 2000 (G. Ianni is currently Associate Professor of Computer Science at the Mathematics Dept., University of Calabria, Italy)
- Giorgio Terracina: Analysis, extraction and exploitation of knowledge from semi-structured information sources, 2002 (G. Terracina is currently Associate Professor of Computer Science at the Mathematics Dept., University of Calabria, Italy)
- Alfredo Garro: A methodological approach to multi-agent systems design and related technologies, 2003 (A. Garro is currently Associate Professor of Computer Engineering at the DEIS Dept., University of Calabria, Italy)
- Simona E. Rombo: Methods and techniques in bioinformatics applied to pattern discovery and protein secondary structures prediction, 2006 (S.E. Rombo is currently Assistant Professor at the department of Mathematics and Computer Science, University of Palermo, Italy)

- Salvatore Garruzzo: Techniques and protocols of information extraction and semantics negotiation: making the Web understandable, 2007 (S. Garruzzo is currently a free-lance professional)
- Fabio Fassetti: Discovering Exceptional Individuals and Properties in Data, 2008 (F. Fassetti is currently Assistant Professor at the DEIS Dept., University of Calabria, Italy)
- Valeria Fionda: Knowledge discovery in bioinformatics: from simple to complex structures, 2009 (V. Fionda is currently working as an Assistant Professor at University of Bozen, Italy.)

5.3 Non-academic Teaching and related activities

- Since 1995 Luigi Palopoli has held various courses at the “Scuola Superiore di Pubblica Amministrazione”, the structure of the Italian Government that supervises the continuing education of central and local public administration employees. The topics include software tools for improved productivity in the public administration, software tools for policy and control, data warehousing, distributed applications.
- Various courses held for the industry (just recently, IFM, ValueTeam, NEC). The topics include Database design methodologies, Data warehousing, Data mining, Ontology design.
- Design of an on-line course “Introduction to Computers” to be used by the technical personnel of the Italian Public Schools.

6 Services

- *Journal of Computer and System Sciences*; Editor of a Special Issue on Knowledge representation and Reasoning (see reference 168 below).
- *AI Communications, the European J. on AI*; Area Editor (Knowledge bases and ontologies).
- *Zentralblatt fur Mathematik und ihre Grenzgebiete – Mathematics Abstract*; Reviewer.
- *AMS Mathematical Reviews*; Reviewer.
- *APPIA-GULP-PRODE Conference on Declarative Programming*, Grado, 1997; Program committee member.
- *APPIA-GULP-PRODE Conference on Declarative Programming*, Peniscola (Spagna), 1998; Program committee member.

- *SEBD 1998*, Ancona, 1998; Tutorial program chair.
- *6th International Workshop on Knowledge Representation meets Databases*, Linköping, 1999; Program committee member.
- *4th IFCIS Conference on Cooperative Information Systems*, Edinburgh, 1999; Program committee member.
- *SEBD 2000*, L'Aquila, 2000; Program committee member.
- *SEBD 2002*, Porto Santo Stefano, 2002; Program committee member.
- *International Conference on Database Theory*, Siena, 2003; Program committee member.
- *International Conference on Declarative Programming*, Reggio Calabria , 2003; Conference chair.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Beijing, 2004; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Compiegne, 2005; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Hong Kong, 2006; Program committee member.
- *International Workshop on Description Logics*, Brixen, 2007; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Silicon Valley, 2007; Program committee member.
- *International Workshop on Ontology Matching*, Busan, 2007; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Sidney, 2008; Program committee member.
- *International Workshop on Ontology Matching*, Karlsruhe, 2008; Program committee member.
- *International Joint Conference on Artificial Intelligence*, Pasadena, 2009; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Milan, 2009; Program committee member.
- *Advanced Knowledge-based Systems*; Special session of the KES'09 Conference, Santiago, Chile, 2009; Program committee member.

- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Toronto, 2010; Program committee member.
- *AAAI International Conference of the American Association for Artificial Intelligence*, San Francisco, USA, 2011; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Lyon, France, 2011; Program committee member.
- *International Workshop on Agent and Social Technologies for Ubiquitous Computing*, Jeju, Korea, 2011; Program committee member.
- *International Joint Conference on Artificial Intelligence*, Pechino, 2013; Program committee member.
- *RCRA Workshop*, Roma, 2013; Program committee member.
- *IEEE-ACM International Conference on Intelligent Agent Technologies*, Atlanta (GA), USA, 2013; Program committee member.

7 Projects

A list of developed project is listed below. The developed project subject area and the role carried out therein are indicated along with the funding agency/company.

- *KIWIS*, funded by EU. Deductive databases. Member of the project team at CRAI.
- *Logidata+*, funded by the National Research Council of Italy. Deductive Object-oriented databases. Leader of the project team at CRAI.
- *Formal systems and tools for advanced databases*, funded by the Research Ministry of Italy. Active and deductive databases. Member of the project team at DEIS.
- *DEUS EX MACHINA*, funded by EU and NSF. Active and deductive databases. Member of the project team at DEIS.
- *AIPA-NetR*, funded by the Italian Authority for Information Systems in the Public Administration. Cooperative information systems. Leader of the project team at DEIS.
- *PTC-Data warehouse*, funded by Consorzio TelCal. Data warehousing. Leader of the project team at DEIS.
- *Intelligent Search Engines*, funded by Consorzio di Ingegneria Economica e Sociale. Web searching techniques. Leader of the project team at DEIS.

- *ADAPT*, funded by EU. Technological transfer. Member of the project team at DEIS.
- *Interdata*, funded by the Research Ministry of Italy. Cooperative information systems. Member of the project team at DEIS.
- *Rule induction, metaquerying and structured pattern extraction over biological databases*, funded by the Research Ministry of Italy. Bioinformatics. Leader of the project team at DEIS.
- *Ambienti intelligenti ed adattativi di sostegno all'e-government ed all'e-learning nelle pubbliche amministrazioni locali*, funded by the Research Ministry of Italy. Knowledge management. Leader of the project team at DEIS. (This project was selected as one of the 32 “Projects of Excellence” by the Research Ministry out of the over two thousands funded within the PON program 2000-2006)
- *Automa*, funded by Regione Calabria and the Research Ministry of Italy. Software systems for automotive logistics support. Leader of the project team at DEIS.
- *Campus-1*, funded by the Research Ministry of Italy. ICT for education. Leader of the project team at DIMET.
- *Aurora*, funded by CM-Sistemi. Data warehousing. Leader of the project team at DIMET.
- *Information Society*, funded by the National Research Council of Italy. Cooperative information systems. Leader of the project team at DIMET.

8 Entrepreneurial Activity

Luigi Palopoli is co-Founder and, since the beginning, a member of the Board of Directors, of Exeura SrL, a spin-off company of University of Calabria (see www.exeura.com), whose core-interest is Knowledge Management. The company, which was founded in 2002, has now 28 full-time employees. It has offices in Rende and Chicago. The company leverages twenty years of leading research and innovation developed at University of Calabria. It developed over 15 market trial applications in the areas of health care, finance, insurance, government and intelligence and describes its business as follows: *Exeura offers a portfolio of tools and solutions based on our unique blend of core competencies in analytics and semantic technologies delivering powerful features to: (1) efficiently access an ever growing set of enterprise data (both structured and unstructured) from a variety of sources (internal and external to the enterprise); (2) rapidly develop unified business and analytical models that can mine the data and provide*

answers in the “business-speak”; (3) make the models easily tunable and instantaneously available for use by the business community; (4) ensure the models can scale with the business demands.

9 List of Publications of Luigi Palopoli

9.1 Articles in International Journals

1 L. Palopoli, D. Rosaci, G.M. Sarné. Introducing specialization in e-commerce recommender systems. *CERA Journal*. To appear.

2 F. Angiulli, F. Fassetti, L. Palopoli. Discovering Characterizations of the Behavior of Outlier Sub-Populations. *IEEE Transactions on Knowledge and Data Engineering*. To appear.

3 G. Greco, E. Malizia, L. Palopoli, F. Scarcello, On the Complexity of Core, Kernel, and Bargaining Set, *Artificial Intelligence*, 175(12-13), 1877–1910, 2011. DOI: 10.1016/j.artint.2011.06.002

4 N. Ferraro, L. Palopoli, S. Panni, S.E. Rombo, Asymmetric Comparison and Querying of Biological Networks, *IEEE-ACM Trans. on Computational Biology and Bioinformatics*, 8(4), 876-889, 2011.

5 F. Fassetti, O.Leone, L. Palopoli, S.E. Rombo, A. Saiardi, IP6K gene identification in plant genomes by tag searching, *BMC-P*, 5(Suppl 2), S1, 2011.

6 L. Palopoli, V. Fionda, Biological Network Querying Techniques: Analysis and Comparison, *Journal of Computational Biology*, 18(4), 2011, 595–625.

7 F. Angiulli, G. Greco, L. Palopoli, Detecting and Repairing Anomalous Evolutions in Noisy Environments, *Annals of Mathematics and Artificial Intelligence*, 2010. To appear.

8 F. Angiulli, R. Ben-Eliyahu-Zohary, L. Palopoli, Outlier detection for simple default theories, *Artificial Intelligence*, 174 (15), p.1247-1253, Oct 2010.

9 G. Greco, E. Malizia, L. Palopoli, F. Scarcello, Non-Transferable Utility Coalitional Games via Mixed-Integer Linear Constraints, *Journal of Artificial Intelligence Research*, Volume 38, pages 633-685, 2010.

10 F. Bruno, L. Palopoli, S.E. Rombo, New trends in graph mining: A review on motif extraction from biological networks, *International Journal on Knowledge Discovery in Bioinformatics*, 1(1), 81–99, 2010.

11 F. Fassetti, L. Palopoli. On the complexity of identifying head elementary free programs, *Theory and Practice of Logic Programming*, 10(1), 113–123, 2010.

- 12** F. Angiulli, F. Fassetti, L. Palopoli. Detecting Outlying Properties of Exceptional Objects, 2009. *ACM Transactions on Database Systems*, 34(1), 2009.
- 13** L. Palopoli, S. Rombo, G. Terracina, G. Tradigo, P. Veltri. Improving protein secondary structure predictions by prediction fusion, *Information Fusion*, 10(3), 217–232, 2009.
- 14** V. Fionda, L. Palopoli, S. Panni, S. Rombo, A technique to search for functional similarities in protein-protein interaction networks. *Intl. Journ. on Data Mining and Bioinformatics*, 3(4), 431–453, 2009.
- 15** F. Angiulli, R. Ben-Eliyahu-Zohary, L. Palopoli, Outlier detection using default reasoning, *Artificial Intelligence*, 172(16-17), 1837–1872, 2008.
- 16** Fabrizio Angiulli, Gianluigi Greco, Luigi Palopoli. Outlier Detection by Logic Programming. *ACM Transactions on Computational Logic*, 9(1), 2007.
- 17** P. De Meo, L. Palopoli, G. Quattrone, D. Ursino. Combining Description Logics with synopses for inferring complex knowledge patterns from XML sources, *Information Systems*, 32(8), 1184–1224, 2007.
- 18** L. Palopoli, D. Rosaci, D. Ursino. Agents’ roles in B2C e-commerce, *AI Communications*, 19(2), 95–126, 2006.
- 19** A. Garro, L. Palopoli, and F. Ricca. Exploiting Agents in E-Learning and Skills Management Context, *AI Communications*, 19(2), 137–154, 2006.
- 20** L. Palopoli, D. Rosaci, G. Terracina, D. Ursino, A graph-based approach for extracting terminological properties from information sources with heterogeneous formats, *Knowledge and Information Systems*, 8(4), 2005.
- 21** L. Palopoli and G. Terracina, CooPS: a system for the cooperative prediction of protein structures, *Journal of Bioinformatics and Computational Biology*, 14, 2004.
- 22** F. Angiulli, L. Palopoli and G. Ianni, On the complexity of inducing categorical and quantitative association rules, *Theoretical Computer Science A*, 314(1-2), 217–249, 2004.
- 23** R. Biamonte, C.M. Mastroianni, L. Palopoli, R. Curia, A. Speranza, S. Palazzo. The care process monitor as an advanced health care risk management instrument: a new exciting experience, *Annals of Oncology*, 15(2), 2004. (Abstract)
- 24** F. Buccafurri, D. Rosaci, G. Sarné, L. Palopoli, Modeling cooperation in multi-agent communities. *Journal on Intelligent Agents for Cognitive Systems*, 5(3), 171–190, 2004.

- 25** L. Palopoli, G. Terracina, D. Ursino. A plausibility description logic for handling information sources with heterogeneous data representation formats, *Annals of Mathematics and Artificial Intelligence*, 39(4), 385–430, 2003.
- 26** L. Palopoli, G. Terracina, D. Ursino. DIKE: a system supporting the semi-automatic construction of CIS from heterogeneous databases. *Software Practice & Experience*, 33(9), 847–884, 2003.
- 27** L. Palopoli, G. Terracina, D. Ursino, Experiences using DIKE, a system for supporting cooperative information systems and data warehouses design. *Information Systems*, 28(7), 835–865, 2003.
- 28** F. Angiulli, R. Ben-Eliyahu-Zohary, G.B. Ianni, L. Palopoli, Computational properties of metaquerying problems. *ACM Trans. on Computational Logics*, 4(2), 149–180, 2003.
- 29** L. Palopoli, D. Saccà, G. Terracina, D. Ursino, Uniform techniques for deriving similarities of objects and subschemes in heterogeneous databases, *IEEE Transaction on Knowledge and Data Engineering*, 15(2), 271–294, 2003.
- 30** A. Garro, L. Palopoli, MASEL: a Multi-Agent System for e-Learning and skill management, *Exp in search of innovation*, 3(3), 126–135, 2003.
- 31** L. Palopoli, L. Pontieri, G. Terracina, D. Ursino, A novel three-level architecture for large data warehouses. *J. of System Architectures*, 47, 937–958, 2002.
- 32** L. Palopoli, D. Rosaci, G. Terracina, D. Ursino, Modeling Web-search scenarios exploiting user and source profiles, *AI Communications*, 14(4), 215–230, 2002.
- 33** L. Palopoli, D. Saccà, G. Terracina, D. Ursino, A technique for deriving hyponymies and overlappings from database schemes, *Data & Knowledge Engineering*, 40(3), 285–314, 2002.
- 34** Marco Cadoli, Giovambattista Ianni, Luigi Palopoli, Andrea Schaerf and Domenico Vasile NP-SPEC: an executable specification language for solving all problems in NP, *Computer Languages*, 26(2-4), 2000, 165–195.
- 35** L. Palopoli, L. Pontieri, G. Terracina, D. Ursino. Intensional and Extensional Integration and Abstraction of Heterogeneous Databases, *Data and Knowledge Engineering*, 35(3), 2000, 201–237.
- 36** R. Ben-Eliyahu, L. Palopoli, V. Zemlyanker. More on tractable disjunctive Datalog, *Journal of Logic Programming*, 46(1-2), 2000, 61–101.

- 37** M. Cadoli, L. Palopoli, F. Scarcello. Propositional lower bounds: generalization and algorithms, *Annals of Mathematics and Artificial Intelligence*, 27, 129–148, 1999.
- 38** A. Bonifati, L. Palopoli, D. Saccá, D. Ursino. Automatic extraction of database scheme semantic properties using knowledge discovery techniques, *Journal of Integrated Design and Process Science*, 3(1), 55–78, 1999.
- 39** L. Palopoli, F. Pirri, C. Pizzuti. Algorithms for selective enumeration of prime implicants, *Artificial Intelligence*, 111(1-2), 41–72, 1999.
- 40** L. Palopoli, D. Saccá, D. Ursino. DL_P: a description logic for extracting and managing complex terminological and structural properties from database schemes, *Information Systems*, 24(5), 403–425, 1999.
- 41** L. Palopoli, D. Saccá, D. Ursino. Semi-automatic techniques for deriving interscheme properties from database schemes. *Data and Knowledge Engineering*, 30(3), 239–273, 1999.
- 42** S. Flesca, L. Palopoli, D. Saccá, D. Ursino. An architecture for accessing a large number of autonomous, heterogeneous databases. *Networking and Information Systems Journal*, 1(4-5), 495–518, 1998.
- 43** M. Cadoli, L. Palopoli. Circumscribing Datalog: Expressive Power and Complexity, *Theoretical Computer Science*, 193, 215–244, 1998.
- 44** F. Angiulli, L. Palopoli, R. Torlone. The GPR System: an Architecture for Integrating Active and Deductive Rules on Complex Database Objects, *Journal of Theory and Practice of Object Systems*, 3(4), 285–302, 1997.
- 45** R. Ben-Eliyahu, L. Palopoli. Reasoning with Minimal Models: Efficient Algorithms and Applications, *Artificial Intelligence*, 96, 421–449, 1997.
- 46** L. Palopoli, R. Torlone. Generalized Production Rules as a Basis for Integrating Active and Deductive Databases, *IEEE Transaction on Knowledge and Data Engineering*, 9(6), 848–862, 1997.
- 47** S. Greco, L. Palopoli, E. Spadafora. Querying Datalog with Arrays: Design and Implementation Issues, *Journal of System Integration*, 6, 299–327, 1996.
- 48** L. Palopoli, C. Zaniolo. Polynomial-Time Computable Stable Models, *Annals of Mathematics and Artificial Intelligence*, 17, 261–290, 1996.
- 49** N. Leone, L. Palopoli, M. Romeo. A Language for Updating Logic Programs and its Implementation, *Journal of Logic Programming*, 23(1), 1–61, 1995.

50 S. Greco, L. Palopoli, E. Spadafora. Extending Datalog with Arrays, *Data and Knowledge Engineering*, 17, 31–57, 1995.

51 L. Palopoli, R. Torlone. A Rule-Based Update Language for Complex Objects with Identity, *Data and Knowledge Engineering*, 13, 67–96, 1994.

52 N. Leone, L. Palopoli, M. Romeo. Modifying Intensional Logic Knowledge, *Fundamenta Informaticae* 21(3), 183–203, 1994.

53 L. Palopoli. Testing Logic Programs for Local Stratification, *Theoretical Computer Science*, 103(2), 205–234, 1992.

54 P. Legato, G. Paletta, L. Palopoli. Optimization of Join Strategies in Distributed Databases, *Information Systems*, 16(4), 363–374, 1991.

55 S. Greco, L. Palopoli, P. Rullo. Netlog: A logic query language for linked model databases, *Data and Knowledge Engineering*, 6(3), 183–203, 1991.

9.2 Articoli in Bolletini e Riviste Nazionali

56 S. Greco, L. Palopoli, N. Leone, P. Rullo, D. Saccá, Logic programming in Datalog: A long tour from theory to practice. *Intelligenza Artificiale*, 5(1), 133-138, 2011.

57 F. Buccafurri, D. Rosaci, G. Sarné, L. Palopoli, A system implementing operation in multi-agent networks, *AI*IA Notizie*, vol. IV, 26–28, 2001.

58 L. Palopoli, D. Saccá, G. Terracina, D. Ursino. Una metodologia per l'estrazione e l'utilizzo di conoscenza intensionale da sorgenti informative eterogenee. *AI*IA Notizie*, XIII(2), 53–67, 2000. In Italian.

59 L. Palopoli, D. Saccá, D. Ursino. Estrazione semi-automatica e semantica di proprietà terminologiche e strutturali tra oggetti di schemi di basi di dati federate. *Rivista di Informatica*, XXX(1), 29–55, 2000. In Italian.

60 F. Franco, L. Palopoli. Negation-free Deductive Databases and Turing Computability, *Rivista di informatica*, XXII(1), 1992.

61 L. Palopoli. A New Proof of Undecidability of Safety of Logic Queries, *ACM SIGACT News*, 21(4), 69–72, 1990.

9.3 Book and Encyclopedia Chapters and Articles in Conference Proceedings

62 G.M.L. Sarné, L. Palopoli, D. Rosaci. A Multi-Tiered Recommender System Architecture for Supporting E-Commerce, Proceedings 6th International Symposium on Intelligent Distributed Computing, Cetraro, 2012. To appear.

- 63** Gianluigi Greco, Enrico Malizia, Luigi Palopoli, Francesco Scarcello Hard and Easy k-Typed Compact Coalitional Games: The Knowledge of Player Types Marks the Boundary. *Proc. European Conference on Artificial Intelligence*. To appear.
- 64** Erika De Francesco, Giuliana Di Santo, Luigi Palopoli and Simona E. Rombo. Genomic Databases Characteristics. In *Encyclopedia of Systems Biology*, Springer, 2012 (To Appear).
- 65** Luigi Palopoli, Simona E. Rombo, Giorgio Terracina, Giuseppe Tradigo and Pierangelo Veltri. Protein Structure Metapredictors. In *Encyclopedia of Systems Biology*, Springer, 2012 (To Appear).
- 66** F. Angiulli, Rachel Ben-Eliyahu-Zohary, L. Palopoli. Tractable Strong Outlier Identification *Proc. 9th International Workshop on Nonmonotonic Reasoning, Action and Change (NRAC-2011)*, Barcellona, 2011.
- 67** G. Greco, E. Malizia, L. Palopoli, F. Scarcello. On The Complexity of the Core over Coalition Structures, 2011, *Proc. Int. Joint Conf. on Artificial Intelligence*.
- 68** F. Fassetti, O. Leone, L. Palopoli, S. Rombo. IP6K gene discovery in plant mtDNA. *Proc. Computational Intelligence methods for Bioinformatics and Biostatistics 2010*. To appear.
- 69** F. Fassetti, O. Leone, L. Palopoli, S. Rombo. IP6K gene identification in plant cells via tag discovery. *Proc. 24th International Symposium on Computer and Information Sciences*. 2010.
- 70** V. Fionda, L. Palopoli, S. Panni, S. Rombo. Extracting similar sub-graphs across PPI Networks. *Proc. 24th International Symposium on Computer and Information Sciences*, 2010.
- 71** G. Greco, E. Malizia, L. Palopoli, F. Scarcello, On the Complexity of Compact Coalitional Games, 2009. *Int. Joint Conf. on Artificial Intelligence*.
- 72** L. Miceli, L. Palopoli, S. Rombo, G. Terracina, G. Tradigo, P. Veltri, Experimental evaluation of protein secondary structure predictors, *Proc. Int. Conf. on Computational Science*, LNCS 5544, Springer-Verlag, 848-857, Baton Rouge, USA, 2009.
- 73** G. Greco, E. Malizia, L. Palopoli, F. Scarcello, Constrained Coalitional Games: Formal Framework, Properties, and Complexity Results, 2009. *Eighth International Conference on Autonomous Agents and Multiagent Systems*, Budapest, May 2009.

- 74** E. De Francesco, G. Di Santo, L. Palopoli, S. E. Rombo, A summary of genomic databases: overview and discussion. In: *Biomedical Data and Applications*, (Amandeep S. Sidhu, Tharam S. Dillon and Elizabeth Chang, Eds). 2008. To appear.
- 75** V. Fionda, L. Palopoli, Network Querying Techniques for PPI network Comparison. In: *Biological data mining in protein interaction networks* (Xiao-Li Li, See-Liong Ng, Eds.). To appear.
- 76** V. Fionda, L. Palopoli, S. Panni, S. Rombo. Protein-protein interaction network querying by a “focus and zoom” approach, Proceedings of the 2nd International Conference on Bioinformatics Research and Development (BIRD’08), Vienna, July 2008.
- 77** F. Angiulli, F. Fassetti, L. Palopoli. An Unsupervised Outlier Detection Approach for Cleaning String Data Entries, SEBD’08, Mondello (PA), 358–365, June 2008.
- 78** V. Fionda, L. Palopoli, S. Panni, S. Rombo. Singling out functional similarities in graph databases, SEBD’08, Mondello (PA), 271–278, June 2008.
- 79** V. Fionda, L. Palopoli, S. Panni, S. Rombo. Bi-Grappin: Bipartite-Graph based Protein Interaction Networks similarity search, IEEE Int. Conf. On Bioinformatics and Biomedicine, Fremont, CA, USA, 355–361, 2007.
- 80** Simona E. Rombo, Luigi Palopoli, Pattern Discovery In Biosequences: From Simple To Complex Patterns. In: *Data Mining Patterns: New Methods and Applications*, Florent Masseglia, Pascal Poncelet and Maguelonne Teisseire, Eds., pag. 85–105, 2007.
- 81** E. Malizia, L. Palopoli, F. Scarcello. Infeasibility Certificates and the Complexity of the Core in Coalitional Games, Twentieth International Joint Conference on Artificial Intelligence, Hyderabad, India, 1402–1407, 2007.
- 82** F. Angiulli, Greco G., L. Palopoli, Trimboli D. The LPOD System: Logic Programming Meets outlier Detection, Intl. Worsh. on Logic Programming and non-monotonic reasoning, LNAI 4483, Springer, 254–259, 2007.
- 83** S. Garruzzo, G.M.L. Sarné, L. Palopoli. Aipp: a fast-Complied E-Payment Protocol, Proceedings of the IADIS International Conference-Applied Computing (IADIS-AC 2006), San Sebastian, Spain, 406–410, April 2006.
- 84** G. Greco, G. Ianni, V. Lio, L. Palopoli. Protection Techniques from Information Extraction, Intl. Conf. on Web Intelligence, Hong Kong, 1029–1033, 2006.

- 85** L. Palopoli, S. Rombo, G. Terracina, G. Tradigo, P. Veltri. SSPrediction: a Framework to Predict Protein Secondary Structures Using Integration, Proceedings of the 19-th IEEE Symposium on Computer-Based Medical Systems (CBMS06), Salt Lake City, Utah, June 2006.
- 86** L. Palopoli, S. Rombo, G. Terracina, G. Tradigo, P. Veltri. Protein Secondary Structure Prediction: How to Improve Accuracy by Integration, Proceedings of the Third International Meeting of Bioinformatics and Biostatistics, Genova, Italy, 931–935, August 2006.
- 87** F. Angiulli, F. Fassetti, L. Palopoli. Un metodo per la scoperta di proprietà inattese, SEBD'06, Portonovo (AN), 321–328, 2006. In Italian.
- 88** L. Gallucci, M. Cannataro, L. Palopoli, P. Veltri. DISelect-based Middleware for Building Adaptive Systems, International Workshop on Authoring of Adaptive and Adaptable Hypermedia, Dublin, Ireland, 377–386, 2006.
- 89** F. Angiulli, G. Greco, L. Palopoli. Detecting and Repairing Anomalous Evolutions in Noisy Environments: Logic Programming Formalization and Complexity Results, IFIP Conf on AI, Santiago, Chile, August 2006.
- 90** L. Palopoli, S. Rombo, G. Terracina. Flexible Pattern Discovery with(Extended) Disjunctive Logic Programming, Proc. of 15th International Symposium on Methodologies for Intelligent Systems, LNAI 3488 Springer Verlag, Saratoga Springs, New York, USA, 578–590, 2005.
- 91** G. Acati, M. Cannataro, E. Giampá, M. Mastratise, L. Palopoli, P. Rullo. A software Platform for Services Delivery in the Public Administration, International Workshop on Adaptive and Self-managed Enterprise Applications, Porto (Portugal), 69–81, 2005.
- 92** F. Angiulli G. Greco, L. Palopoli, Detecting outliers via logical theories and its data complexity, Discovery Science, LNAI 3245, 101–113, Springer-Verlag, 2004.
- 93** F. Angiulli G. Greco, L. Palopoli, Discovering anomalies in evidential knowledge by logic programming, Intl. Conf. on Logics in Artificial Intelligence, LNAI 3229, 578–590, Springer-Verlag, 2004.
- 94** F. Angiulli, R. Ben-Elyiahu-Zohary, L. Palopoli, Outlier detection using disjunctive logic programming. *European Conference on Artificial Intelligence*, Valencia, 416–419, 2004.
- 95** Buccafurri, F., Palopoli, L., Rosaci, D., G.M.L. Sarné, Finding the Best Agents for Cooperation, in: *Intelligent Technologies for Information Analysis*, Zhong and Liu, Eds., Ch. 14, Springer, 2004.

- 96** P. Grimaldi, S. Rombo, G. Terracina, L. Palopoli, Derivazione efficiente di pattern strutturati frequenti da database di natura biologica, *SEBD'04*, Cagliari, Italy, June 2004. In Italian.
- 97** F. Angiulli, R. Ben-Elyiahu-Zohary, L. Palopoli, Outlier detection using default logic. *Proc. International Joint Conference on Artificial Intelligence*, Acapulco, 833–838, 2003.
- 98** L. Palopoli, G. Terracina, Improving protein extraction predictions by teamwork, *Proc. Asia-Pacific Bioinformatics Conference*, Adelaide, Australia, 163–171, 2003.
- 99** A. Garro, L. Palopoli, An XML Multi-Agent System for e-Learning and Skill Management, in: *Agent Technologies, Infrastructures, Tools, and Applications for E-Services: Revised papers from the 3rd International Symposium on Multi-Agent Systems, Large Complex Systems, and E-Businesses*, Erfurt, Thuringia (Germany), Oct. 2002, LNAI 2592, Springer-Verlag, 283–294.
- 100** G. Terracina, L. Palopoli, Discovering frequent structured patterns from string databases: an application to biological sequences, *Proc. of The 5th International Conference on Discovery Science*, Lbeck, Germany, 2002, LNAI Springer Verlag.
- 101** L. Palopoli, G. Terracina, D. Ursino, A plausibility description logics for reasoning with information sources having different formats and structures, *Proc. Int. Symp. on Intelligent Syst. 2002*, Lion (France), 46–54, LNAI Springer-Verlag.
- 102** A. Garro, G. Terracina, L. Palopoli, Exploiting Agents for Improving Protein Structure Prediction by Teamwork, *Worksh. on Bioinformatica, Conf. AI*IA*, Siena, 10–13, 2002.
- 103** Garro A., Palopoli L., Sacc D., E-Learning Agents: A New Approach to E-Learning. *Conf. on Sw engineering and agent technologies*, Palermo, Italy, March 2002.
- 104** F. Buccafurri, D. Rosaci, G. Sarné, L. Palopoli, A system implementing operation in multi-agent networks, *Workshop WOA'01*, Pitagora Ed., Bologna, 2001.
- 105** L. Palopoli, D. Rosaci, G. Terracina, D. Ursino, Un modello concettuale per rappresentare e derivare la semantica associata a sorgenti informative strutturate e semi-strutturate, *SEBD'01*, Venezia, Italy, 131–145, 2001. In Italian.
- 106** F. Angiulli, G.B. Ianni, L. Palopoli, On the complexity of mining association rules, *SEBD'01*, Venezia, Italy, 177–184, 2001.

- 107** F. Buccafurri, D. Rosaci, G. Sarné, L. Palopoli, Spy: a multi-agent model yielding semantic properties, *Proc. of Second Asia-Pacific Conf. on Intelligent Agent Technology*, Maebashi, Japan, 44–53, World-Scientific, 2001.
- 108** L. Palopoli, D. Rosaci, G. Terracina, D. Ursino, Supporting User-Profiled Semantic Web-Oriented Search, *Proc. of International Conference on Cooperative Information Agents*, Modena, Italy, 26–31, LNAI, Springer Verlag, 2001.
- 109** L. Palopoli, G. Terracina, D. Ursino, A graph-based approach for extracting terminological properties of elements of XML documents, *Proc. of International Conference on Data Engineering*, Heidelberg, Germany, 330–340, IEEE Computer Society Press, 2001.
- 110** S. Castano, L. Palopoli, R. Torlone. A general methodological framework to the development of Web-based information systems. *Proc. The 2nd International Workshop on the World Wide Web and Conceptual Modeling*, Salt Lake City, Nov. 2000, LNCS, Springer Verlag.
- 111** L. Palopoli, G. Terracina, D. Ursino. The System DIKE: towards the semi-automatic synthesis of Cooperative Information Systems and Data Warehouse. *Proc. Int. Symposium on Advances in Databases and Information Systems*, Prague, September 2000.
- 112** L. Palopoli, D. Saccá, G. Terracina, D. Ursino. Semi-automatic extraction of hyponymies and overlappings from database schemes. *Proc. Intl. Conf. on Database and Expert Systems Applications*, Greenwich (UK), September 2000.
- 113** L. Palopoli, L. Pontieri, G. Terracina, D. Ursino Semi-automatic construction of a data warehouse from numerous large databases. *Proc. ReTIS 2000*, Basel, 55–80, May 2000.
- 114** F. Angiulli, R. Ben-Eliyahu, G. Ianni, L. Palopoli. Computational Properties of metaquerying problems. *Proc. ACM Symp. on Princ. of Database Systems '00*, 237–244, Dallas (TX), May 2000.
- 115** L. Palopoli et al., Il datawarehouse del “Piano Telematico Calabria”: Architettura ed applicazioni OLAP. *Congresso Nazionale dell’AICA*, Taormina, September 2000. In Italian.
- 116** L. Palopoli, D. Saccá, G. Terracina, D. Ursino. Rappresentazione uniforme di sorgenti informative strutturate e semi-strutturate. *Congresso Nazionale dell’AICA*, Taormina, September 2000. In Italian.
- 117** L. Palopoli, G. Terracina, D. Ursino. Derivazione di iponimie/iperonimie tra entità appartenenti a basi di dati eterogenee. *SEBD'00*, L’Aquila, June 2000, 357–370. In Italian.

- 118** F. Angiulli, G.B. Ianni, L. Palopoli. Metaquerying: proprietà e tecniche di implementazione. *SEBD'00*, L'Aquila, June 2000, 317–330. In Italian.
- 119** S. Castano, L. Palopoli, R. Torlone. The InterData methodological framework for the Development of Web-based Information Systems. *SEBD'00*, L'Aquila, June 2000, 139–152.
- 120** N. Leone, L. Palopoli, D. Saccá. On the complexity of search queries. In: Polle, Ripke, Schewe, eds., *Fundamentals of Information Systems*, Kluwer Academic pub., 113–128, 1999.
- 121** L. Palopoli, D. Saccá, G. Terracina, D. Ursino. A unified graph-based framework for deriving nominal interscheme properties, type conflicts and object cluster similarities. *4th IFCS Conference on Cooperative Information Systems (CoopIS'99)*, Edimburgh (UK), IEEE Press, 34–45, 1999.
- 122** L. Palopoli, L. Pontieri, D. Ursino. Automatic and semantic techniques for scheme integration and scheme abstraction. *Intl. Conference on Database and Expert Systems Applications (DEXA'99)*, Firenze, 511–520, 1999.
- 123** M. Cadoli, L. Palopoli, A. Schaerf, D. Vasile. NP-SPEC: An executable specification language for solving all problems in NP. *Intl. Workshop on Practical Aspects of Declarative Languages (PADL'99)*, LNCS 1551, Springer, San Antonio (TX), 1999.
- 124** G.B. Ianni, L. Palopoli, D. Vasile, D. Ursino. Un tool di ausilio alla progettazione di datawarehouse. *Congresso nazionale dell'AICA*, Padova, 1999. In Italian.
- 125** L. Palopoli, G. Terracina, D. Ursino. Approcci e strumenti semiautomatici per il re-engineering di basi di dati eterogenee. *Congresso nazionale dell'AICA*, Padova, 1999. In Italian.
- 126** L. Palopoli, L. Pontieri, D. Ursino. Progettazione semi-automatica di data warehouse di grandi dimensioni. *SEBD'99*, Como, June 1999. In Italian.
- 127** Leone N., Palopoli L., Saccá D. On the Complexity of Search Queries, *Proc. Intl. Conf. on Foundations of Models and Languages for Data and Objects*, Ostfriesland, Germany, October 5–9, 1998.
- 128** L. Palopoli, D. Saccá, D. Ursino. An automatic technique for detecting type conflicts in database schemes. *ACM Conference on Information and Knowledge Management (CIKM'98)*, 306–313, Washington, 1998.
- 129** L. Palopoli, D. Saccá, D. Ursino. Semi-automatic, semantic discovery of properties from database schemes. *International Database Engineering and Applications Symposium (IDEAS'98)*, IEEE Press, Cardiff (UK), 244–253, 1998.

- 130** L. Palopoli, D. Saccá, D. Ursino. A novel approach to cooperative information system construction and management. *Intl. Workshop on Intelligent Information Systems (III '98)*, 109–126, Brighton (UK), 1998.
- 131** A. Bonifati, L. Palopoli, D. Saccá, D. Ursino. Automatic Extraction of Database Scheme Semantic Properties Using Knowledge Discovery Techniques. *Intl. Workshop on Issues and Applications of Database Technology (IADT '98)*, 392–399, Berlino, 1998.
- 132** L. Palopoli, D. Saccá, D. Ursino. Automatic derivation of terminological properties from database schemes. *Intl. Conference on Database and Expert Systems Application (DEXA '98)*, LNCS 1460, Springer, Vienna, 90–99, 1998.
- 133** M. Cadoli, L. Palopoli, F. Scarcello. Propositional lower bounds: generalization and algorithms. *Intl. Worksh. on Logics in Artificial Intelligence (JELIA '98)*, LNAI 1489, 355–367, Springer, Dagstuhl (Germania), 1998.
- 134** S. Flesca, L. Palopoli, D. Saccá, D. Ursino. Using a data repository as a mediator for constructing Federated Information Systems. *Intl. Workshop on Innovative Internet Information Systems (IIIS '98)*, Pisa, 189–204, 1998.
- 135** A. Bonifati, L. Palopoli, D. Saccá, D. Ursino. Utilizzo della Logica Descrittiva per l'estrazione di proprietà terminologiche e strutturali complesse, *SEBD'98*, Ancona, June 1998. In Italian.
- 136** L. Palopoli, D. Saccá, D. Ursino. D.I.K.E.: un sistema per l'estrazione, la rappresentazione e l'utilizzo di conoscenza interschema su basi di dati eterogenee, *Conf. AI*IA*, Padova, September 1998. In Italian.
- 137** L. Palopoli, C. Pizzuti, F. Pirri. An Algorithm for Enumerating Prime Implicants. *CAEPIA '97*, Malaga, Spain, 1997.
- 138** A. Bonifati, L. Palopoli, D. Saccá, D. Ursino. Discovering Description Logic Assertions from Database Schemes, *Intl. Workshop on Description Logics (DL '97)*, 144–148, Gif sur Yvette (Francia), September 1997.
- 139** M. Cadoli, L. Palopoli, M. Lenzerini. Datalog and Description Logics: Expressive Power. *Intl. Worksh. on Database Programming Languages*, LNCS 1369, Springer, Estes Park (CO), 281–298, 1997.
- 140** M. Cadoli, L. Palopoli, M. Lenzerini. Datalog and Description Logics: Expressive power. *APPIA-GULP-PRODE Conference on Declarative Programming*, Grado, 333–344, 1997.
- 141** M. La Camera, L. Palopoli, D. Saccá, D. Ursino. Knowledge Discovery su schemi per l'integrazione di sistemi di basi di dati, *SEBD'97*, 166–190, Verona, June 1997. In Italian.

- 142** S. Flesca, L. Palopoli, D. Saccá, D. Ursino. NET.R: un sistema per l'interfacciamento su Internet, tramite WWW, del repository della Pubblica Amministrazione, *Atti del Congresso nazionale dell' AICA*, 49–70, Milano, September 1997. In Italian.
- 143** R. Ben-Eliyahu, L. Palopoli, V. Zemlyanker. The expressive power of tractable disjunction, *European Conference on Artificial Intelligence*, Budapest, Morgan Kaufman, 345–349, 1996.
- 144** M. Cadoli, L. Palopoli, M. Lenzerini. Datalog and Description Logics: Expressive Power. Preliminary Report. *Intl. Workshop on Description Logics (DL '96)*, 1996.
- 145** F. Buccafurri, N. Leone, L. Palopoli, P. Rullo. Disjunctive Ordered Logic, *Intl. Conference on Database and Expert Systems Applications*, London, LNCS 978, 302–312, Springer-Verlag, 1995.
- 146** S. Greco, L. Palopoli, E. Spadafora. Datalog^A: Array Manipulations in a Deductive Database Language, *4th Intl. Conference on Database Systems for Advanced Applications*, Singapore, World Scientific Pub., 180–188, 1995.
- 147** F. Scarcello, N. Leone, L. Palopoli. Curbing Theories: Fixpoint Semantics and Complexity Issues, *GULP 1995*, Vietri, 545–554, 1995.
- 148** F. Angiulli, F. De Marte, L. Palopoli, R. Torlone. The GPR System: an Architecture for Integrating Active and Deductive Rules, *SEBD'95*, Ravello, 35–53, 1995.
- 149** R. Ben-Eliyahu, L. Palopoli. Reasoning with Minimal Models: Efficient Algorithms and Applications, *4th Intl. Conferece of Principles of Knowledge Representation and Reasoning*, Bonn, Morgan Kaufman, 39–50, 1994.
- 150** L. Palopoli, R. Torlone. Active and Passive Rules for Complex Object Databases, *Intl. Conference on Database and Expert Systems Applications*, Atene, LNCS 856, Springer-Verlag, 390–399, 1994.
- 151** L. Palopoli, R. Torlone. Modeling Database Applications Using Generalized Production Rules, *IEEE Workshop on Research Issues in Data Engineering: Active Database Systems*, Houston, IEEE Press, 30–38, 1994.
- 152** L. Palopoli, C. Zaniolo. Polynomial Time Computable Stable Models. *Intl. Logic Programming Symp.*, 645, Vancouver, 1993.
- 153** R. Ben-Eliyahu, L. Palopoli. Model Selection in Disjunctive Logic Programming, *ILPS'93 Workshop on Structural Complexity and Recursion-Theoretic Methods in Logic Programming*, Vancouver, 1993.

- 154** N. Leone, L. Palopoli, M. Romeo. Updating Logic Programs, *Intl. Symposium on Methodologies for Intelligent Systems*, Trondheim, LNAI 689, Springer, 235–244, 1993.
- 155** L. Palopoli, R. Torlone. Actions and Transactions on Complex Objects, *SEBD'93*, Gizzeria Lido, 17–31, 1993.
- 156** L. Palopoli, R. Torlone. Management of Extended Update Operations. In: *LOGIDATA+: Deductive databases with complex objects*, ed. P. Atzeni, LNCS 701, Springer-Verlag, 60–78, 1992.
- 157** L. Palopoli et. al. Prototypes in the LOGIDATA+ Project. In: *LOGIDATA+: Deductive databases with complex objects*, ed. P. Atzeni, LNCS 701, Springer-Verlag, 252–273, 1992.
- 158** L. Palopoli, R. Torlone. Maintaining Integrity Constraints on Complex Objects, *Intl. Workshop on Updates and Constraint Handling in Advanced Database Systems*, Pisa, ERCIM, 10–24, 1992.
- 159** L. Palopoli, R. Torlone. Specifying the Dynamics of Complex Object Databases. In: *Selected papers from the 4th Int. Workshop on Foundations of Models and Languages for Data and Objects*, WCS, Springer, Volkse (Germany), 1992.
- 160** L. Palopoli, R. Torlone. Declarative update specifications on complex object databases, *ILPS'91 Workshop on Deductive Databases*, San Diego, 1991.
- 161** N. Leone, L. Palopoli, P. Restuccia, M. Romeo. Epsilon Adaptation on the EDS Machine: Some Implementation Issues, *GULP 1991*, Pisa, 79–91, 1991.
- 162** S. Greco, L. Palopoli, P. Rullo. Updating Deductive Databases: a Survey, *Atti del Congresso Annuale dell'AICA*, Vol. 1, Bari, 211–226, 1990.
- 163** L. Palopoli. La Semantica degli Aggiornamenti su Programmi Logici di Horn, *GULP 1990*, Padova, 347–361, 1990. In Italian.
- 164** L. Palopoli. Implementing Logic Programming with Sets Using non 1NF relational algebra, *Atti del Congresso Annuale dell'AICA*, Vol. 2, Cagliari, 59–73, 1988.
- 165** M. Dispinzeri, L. Palopoli, C. Pizzuti. LOAR: un Sistema di Interrogazione Logico-Algebrico, *GULP 1988*, Roma, 329–339, 1988. In Italian.
- 166** L. Palopoli. La Semantica della Negazione nei Programmi Logici Generali, *Atti del Congresso Annuale dell'AICA*, Trento, 457–478, 1987. In Italian.

9.4 Other Writings

167 L. Palopoli. Review of the article “*Evolvement of influence in hierarchies*”, by R. Arlegi, D. Dimitrov; *Economic Letters* 117 (2012), 484–486. AMS Mathematical Reviews MR2957604, 2013.

168 L. Palopoli. Review of the book “*Data Mining: Concepts, models, methods, algorithms*”, by M. Kantardzic, Wiley and IEEE Press publishers. AMS Mathematical Reviews MR2894535, 2012.

169 L. Palopoli. Editor’s foreword. *J. Comput. Syst. Sci.* 78(1): 1 (2012).

170 L. Palopoli. Review of the article *False-name manipulations in weighted voting games* by Aziz, Haris; Bachrach, Yoram; Elkind, Edith; Paterson, Mike; *J. Artificial Intelligence Res.* 40 (2011), 57–93. AMS Mathematical Reviews MR2805238, 2011.

171 L. Palopoli. Review of the article *Reconcilable differences* by Green, Todd J.; Ives, Zachary G.; Tannen, Val; *Theory Comput. Syst.* 49, No. 2, 460–488 (2011). *Zentralblatt für Mathematik und ihre Grenzgebiete*.

172 L. Palopoli. Review of the article *On the finite controllability of conjunctive query answering in databases under open-world assumption* by Rosati, Riccardo; *Journal of Computer and System Sciences*, 77 (2011). AMS Mathematical Reviews 2797289, 2011.

173 L. Palopoli. Review of the article *Weighted games without a unique minimal representation in integers* by Freixas, Josep; Molinero, Xavier, *Optimization methods and Software*, 25(2), (2010). AMS Mathematical Reviews 2738666, 2011.

174 L. Palopoli. Review of the article *Empirical hardness models: methodology and a case study on combinatorial auctions* by Leyton-Brown, Kevin; Nudelman, Eugene; Shoham, Yoav., *J. ACM* 56 (2009), n. 4, Art. 22. AMS Mathematical Reviews 2590824, 2010.

175 L. Palopoli. Review of the article *Representation theorems for explanatory reasoning based on cumulative models* by Daz, A.; Uztegui C., *J. Appl. Log.* 6 (2008), no. 4, 564–579. AMS Mathematical Reviews 2465092, 2009.

176 L. Palopoli. Review of the article *Synthesizing monadic predicates* by Meghini, C.; Spyrtos, N., *J. Logic Comput.* 18 (2008), no. 6, 831–847. AMS Mathematical Reviews 2460920, 2009.

177 L. Palopoli. Review of the article *Epistemic conditions for collective action* by S.R. Chant and Z. Ernst. AMS Mathematical Reviews 2445368, 2009.

- 178** L. Palopoli (in collaboration with F. Fassetti). Review of the book “*Data quality. Concepts, methods and techniques*”, by C. Batini and M. Scannapieco, Unitem pub.. Zentralblatt fur Mathematik und ihre Grenzgebiete, pre05207838, 2008.
- 179** L. Palopoli. Review of the article *Forgetting literals with varying propositional symbols* by Yves Moinard. AMS Mathematical Reviews 2368498, 2008.
- 180** L. Palopoli. Review of the book “*An inductive logic programming approach to statistical relational learning*”, by K. Kersting, FAIA 148, IOS Press, 2006. Zentralblatt fur Mathematik und ihre Grenzgebiete, 1111.68103
- 181** L. Palopoli. Review of the article “*Precise goal-independent abstract interpretation of constraint logic programs*, by P. Schachte, *Theor. Comput. Sci.* 293, No. 3, 557-577 (2003). Zentralblatt fur Mathematik und ihre Grenzgebiete, 1046.68037
- 182** L. Palopoli. Review of the article “*Aggregate languages for constraint databases*”, by I. Chomichi and L. Libkin, in: *Constraint databases*. Kuper, Gabriel, eds., Springer, Berlin, 2000. Zentralblatt fur Mathematik und ihre Grenzgebiete.
- 183** L. Palopoli. Review of the article “*Separating Auxiliary Arity Hierarchy of First-Order Incremental Evaluation Systems Using $(3k+1)$ -ary Input Relations.*”, by G. Dong, L. Zhang, *International Journal of Foundations of Computer Science*, 11(4):573-578, 2000. Zentralblatt fur Mathematik und ihre Grenzgebiete.
- 184** L. Palopoli. Review of the book “*Oracle SQL & PL/SQL*”, by K. Loney and R. Caremichael, Osborne-McGraw-Hill, pub., 1998. Zentralblatt fur Mathematik und ihre Grenzgebiete, 915.68035.
- 185** L. Palopoli. Review of the book “*Parallel, object-oriented and active knowledge base systems*”, by I. Vlahavas and N. Bassiliades, Kluwer Academic, pub., 1998. Zentralblatt fur Mathematik und ihre Grenzgebiete, 902.68041.
- 186** L. Palopoli. Review of the book “*Multimedia databases in perspective*”, Apers, Peter M.G. (ed.); Blanken, Henk M. (ed.); Houtsma, Maurice A.W. (ed.) Springer, 1997. Zentralblatt fur Mathematik und ihre Grenzgebiete, 0943.68044.
- 187** L. Palopoli. Review of the book “*Database programming with JDBC and Java*”, by G. Reese, O'Reilly, pub., 1997. Zentralblatt fur Mathematik und ihre Grenzgebiete, 891.68032.

188 L. Palopoli. Review of the book “*Database concurrency control: methods, performance and analysis*”, by A. Thomasian, Kluwer Academic, pub., 1996. Zentralblatt für Mathematik und ihre Grenzgebiete, 869.68040.

189 L. Palopoli. Review of the book “*Fuzzy databases: principles and applications*”, by F.E. Petry, Kluwer Academic, pub., 1996. Zentralblatt für Mathematik und ihre Grenzgebiete, 853.68086.

190 L. Palopoli. Review of the article “*A transformation system for deductive database modules with perfect model semantics*”, by M.J. Maher, *Theoretical Computer Sc.* 110, 1993. Zentralblatt für Mathematik und ihre Grenzgebiete, 780.68022.

191 T. Cariati, M. Giacomazza, L. Palopoli, G. Pellegrino, L. Tradigo. *Alfabetizzazione informatica avanzata*. A cura di D. Saccá, Edizioni Consorzio per l'Università a Distanza, Rende, 1992. In Italian.