europass Curriculum vitae

PERSONAL INFORMATION

AGOSTINO DOVIER

University of Udine, DMIF, Via delle Scienze 206, 33100 Udine, Italy

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Gender Male | Date of birth -omissis- | Nationality Italian

WORK EXPERIENCE

Dec 2016 – Present — Professor of Computer Science

SSD	INF/01, Informatica
Teaching	Foundations of Computer Science
Teaching	Automated Reasoning
Heading	Constraint and Logic Programming Lab
Advisor	From 1997: advisor/coadvisor of more than 150 bachelor and master students

Nov 2001 – Nov 2016 — Associate Professor of Computer Science

Institution	University of Udine, Italy
Teaching	Foundations of Computer Science
Teaching	Constraint Programming and Planning
Teaching	Information Theory and Cryptography

Apr 1997 – Oct 2001 — Researcher in Computer Science

Institution	University of Verona, Italy
Teaching	Foundations of Computer Science
Teaching	Computational Complexity

Feb 1997 – Apr 1997 — Post DOC research position CNR

Research	Constraint Programming
Institution	University of Udine, Italy

EDUCATION AND TRAINING

1992–1996 — PhD in Computer Science

Dottorato di Ricerca in Informatica

Dissertation Title	Computable Set Theory and Logic Programming
Institution	University of Pisa, Italy

1986–1991 — Master Degree in Computer Science

Laurea in Scienze dell'Informazione

Thesis Title:	Logic Programming with Sets
Institution	University of Udine, Italy

ACADEMIC POSITIONS

2022 – Present — Head of didactics, University of Udine

Delegato del rettore alla didattica

2020 – Present **Member of the EC (giunta) of the Italian association (of professors and researchers) of Informatica (GRIN)**

2018 – 2021 **Member of the Italian habilitation committee (ASN) 01/B1 (Informatica)**

Processed 298 applications for full professor and 494 for associate professor

2016 – 2022 **Head of the Computer Science curricula, University of Udine**

Consolidation of the Bachelor and Master Degrees in Informatica

Activation of the bachelor degree in Internet of Things, Big Data, Machine Learning

Activation of the Master Degree in Artificial Intelligence and Cybersecurity, International program, double degree with AAUK, Austria

Handling teaching under the COVID emergency

RESEARCH POSITIONS

2024 – Present **Theory and Practice of Logic Programming**

Editorial advisor

Publisher Cambridge University Press

2018 – Present **Member of Executive committee (Direttivo) of the Italian association for logic programming (GULP)**

As former president

2016 – 2023 **Theory and Practice of Logic Programming**

Area Editor Constraints

Publisher Cambridge University Press

2012 – 2018 **President of the Italian association for logic programming (GULP)**

Conferences in Catania, Torino, Genova, Milano, Trieste, Bolzano

PhD school in Genova

2012 – Present **Track editor of Algorithms for Molecular Biology**

Track Constraints and Bioinformatics

Publisher Springer Nature

2012 – Present **Member of Executive committee of the (international) Association for Logic Programming**

As editor of the ALP Newsletter

2010 – Present **Editor of the Association for Logic Programming Newsletter**

`https://logicprogramming.org/`

2008 – 2012 **Member of Executive committee of the (international) Association for Logic Programming**

Conferences in Udine, Pasadena (CA–USA), Edinburgh (Scotland–UK), Lexington (KY–USA), Budapest (Hungary)

2000 – 2011 **Member of Executive committee (Direttivo) of the Italian association for logic programming (GULP)**

Conferences in Havana (Cuba), Evora (PT), Madrid (ES), Reggio Calabria, Parma, Roma, Bari, Messina, Perugia, Ferrara, Rende, Pescara

RESEARCH

My research area is centered in Artificial Intelligence, with a focus on languages and techniques for knowledge representation and automated reasoning. In particular, my recent research interests include the definition and the (parallel) implementation of declarative programming languages and their applications in planning, scheduling, with particular emphasis on robotics and bioinformatics.

I am author or co-author of more than 160 peer reviewed international research papers, co-editor/author of three books and of some journal special issues and I have been program/general chair/co-chair of some international meetings. Among them we cite:

- Conference chair of CILC 2023 (Udine), 38th Italian Conference on Computational Logic
- Program chair of AIxIA 2022 (Udine), International Conference of the Italian Association for Artificial Intelligence
- Program chair of ICLP 2012 (Budapest), International Conference on Logic Programming,
- General chair of ICLP 2008 (Udine), International Conference on Logic Programming,
- Program chair of several editions of the International Worskhops on Constraint Based Methods for Bioinformatics (2005–2018)

I am in the editorial board of international journals, and I have been in the PC of hundreds of national and international workshops and conferences. I won some research awards and held keynote invited talks, in particular:

- Il problema del Protein Folding e i relativi approcci basati su programmazione con vincoli. Tutorial at CILC 2004, Parma (Italy).
- How Logic Programming can Fold a Protein, ICLP 2011 (DC), Lexington, Kentucky.
- Constraints and Biology: ACP Summer School, Wrocław, Poland, 2012.
- Constraints and Bioinformatics: Results and Challenges. Tutorial at CP 2015, Cork, Ireland.
- The role of SAT, CP, and Logic Programming in Computational Biology. Joint Conferences ICLP, SAT, CP 2017, Melbourne.
- The SATisfiability problem and its impact. CILC 2019, Trieste (Italy).
- Constraint Programming: Autumn School on Logic and Constraint Programming, 2021 Porto, Portugal

I founded and chair the Constraint and Logic Programming Lab and the AI for Human Computer collaboration lab of the University of Udine.

TEACHING

Currently I teach the courses of Fondations of Computer Science at the Bachelor level and of Automated Reasoning at the Master level and an interdisciplinary course of Introduction to AI. In the years I have been teaching Information Theory, Computational Complexity, Cryptography, as well as many introductory courses to computer science for several course programs.

I have been supervisor of more than 170 bachelor, master, and PhD Students. Among them I report: Elisa Quintarelli (Associate Professor, University of Verona), Alessandro Dal Palù (Associate Professor, University of Parma), Jacopo Mauro (Professor, University of Southern Denmark), Luca Bortolussi (Professor, University of Trieste), Ferdinando Fioretto (Assistant Professor, University of Virginia, Mario Gerla Award winner), Alice Tarzariol (Assistant Professor, AAUK, Austria), Francesco Fabiano (Associate Professor (visiting), NMSU), Federico Campeotto (Senior Software Engineer, Motional, Boston), Pietro Totis (Senior AI Research Associate at JPMorgan Chase & Co, Madrid), Luca Foschiani (Software Engineer at Mathworks, Cambridge, UK), Giulia Francescutto (Software Engineer at Siemens, Vienna), Alberto Ghedin (Solution Architect at Engineering, Padova), and also the excellent students that later started different challenging experiences: Gianni Zongaro and Raffaele Cipriano (professional musicians), and Marco Meneghin (Dominican friar).

PERSONAL SKILLS

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C2	B2	C1	C1
Furlan	C1	C1	C2	C1	B1
Graesan	C2	C2	C2	C2	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Computer skills Professor of Computer Science, international expert in Programming Languages, Algorithms, Computer Modeling, Computer Programming, AI languages and Techniques, Cryptography

Other skills Jazz/Rock/Bossa Nova/Pop guitar player (pro level)

Driving licence A, B

MAIN PUBLICATIONS

1. A. Dovier, E. G. Omodeo, E. Pontelli, and G. Rossi. {log}: A Language for Programming in Logic with Finite Sets. Journal of Logic Programming, 28(1):1–44, 1996, (Elsevier, North Holland). [129 citations + 85 of the conference version]
2. A. Dovier, A. Policriti, and G. Rossi. A uniform axiomatic view of lists, multisets and the relevant unification algorithms. *Fundamenta Informaticae* 36(2/3):201–234, 1998 (IOS Press). [61 citations]
3. A. Dovier, E. Pontelli, and G. Rossi. A Necessary condition for Constructive Negation in Constraint Logic Programming. *Information Processing Letters*, 74(3–4), pp. 147-156, 2000 (Elsevier, North Holland) [15 citations]
4. A. Dovier, C. Piazza, E. Pontelli, and G. Rossi. Sets and constraint logic programming. ACM Transaction on Programming Language and Systems (TOPLAS), 22(5):861–931, 2000 (ACM press). [164 citations]
5. A. Dovier, E. Pontelli, and G. Rossi. Constructive negation and constraint logic programming with sets. New Generation Computing 19(3)209–255, May 2001 (Ohmsha Ltd and Springer-Verlag). [50 citations]
6. A. Dovier and C. Piazza. The Subgraph Bisimulation Problem. IEEE Transaction on Knowledge and Data Engineering, 15(4):1055–1056, 2003. [33 citations]
7. A. Dovier, C. Piazza and A. Policriti. An efficient algorithm for computing bisimulation equivalence. Theoretical Computer Science 311(1–3):221–256, 2004 (Elsevier). [216 citations + 86 of the conference version]
8. F. Avanzini, D. Rocchesso, A. Belussi, A. Dal Palù, and A. Dovier. Designing an Urban-Scale Auditory Alert System. *IEEE Computers* 37(9):55–61, September 2004. [17 citations]
9. A. Dal Palù, A. Dovier, and F. Fogolari. Constraint logic programming approach to protein structure prediction. BMC Bioinformatics, 5(186):1–12, 2004. [102 citations]
10. A. Dovier, E. Pontelli, and G. Rossi. Set Unification. Theory and Practice of Logic Programming 6(6):645-701, 2006 (Cambridge University Press). [73 citations]
11. A. Dal Palù, A. Dovier, and E. Pontelli. A constraint solver for discrete lattices, its parallelization, and application to protein structure prediction. Software-Practice and Experience, 37(13):1405–1449, 2007 (Wiley). [51 citations]
12. A. Dovier, C. Piazza, and G. Rossi. A uniform approach to constraint-solving for lists, multisets, compact lists, and sets. ACM Transaction on Computational Logics (TOCL), 9(3) 2008 (ACM press). [40 citations]
13. A. Dal Palù, A. Dovier, E. Pontelli, and G. Rossi. GASP: Answer Set Programming with Lazy Grounding. Fundam. Inform. 96(3): 297–322, 2009. [100 citations]
14. A. Dovier, A. Formisano, and E. Pontelli. An Empirical Study of Constraint Logic Programming and Answer Set Programming Solutions of Combinatorial Problems. J. of Experimental & Theoretical Artificial Intelligence 21(2):79–121, June 2009 (Taylor & Francis). [69 citations]
15. A. Dovier, A. Formisano, and E. Pontelli. Multi-valued Action Languages with Constraints in CLP(FD). Theory and Practice of Logic Programming 10(2):167–235, 2010 (Cambridge). [50 citations]
16. A. Dal Palù, A. Dovier, F. Fogolari, and E. Pontelli. CLP-based protein fragment assembly. Theory and Practice of Logic Programming 10(4-6): pp 709-724, July 2010 [35 citations]
17. A. Dovier and E. Pontelli (eds.) A 25 Year Perspective on Logic Programming. Achievements of the Italian Association for Logic Programming, GULP. Springer-Verlag Vol. 6125 of LNCS, 2010. [157 citations]
18. F. Campeotto, A. Dal Palù, A. Dovier, F. Fioretto, and E. Pontelli. A Constraint Solver for Flexible Protein Model. J. Artif. Intell. Res. (JAIR) 48: 953-1000, 2013. [24 citations]
19. D. Ancona and A. Dovier. A Theoretical Perspective of Coinductive Logic Programming. Fundam. Inform. 140(3-4): 221-246 (2015) [36 citations]
20. A. Dal Palù, A. Dovier, A. Formisano, and E. Pontelli: CUD@SAT: SAT solving on GPUs. J. of Experimental & Theoretical Artificial Intelligence 27(3): 293-316 (2015) [73 citations]
21. N.-F. Zhou, R. Barták, and A. Dovier. Planning as tabled logic programming. Theory and Practice of Logic Programming 15(4-5): 543-558 (2015) [31 citations]
22. R. Calegari, E. Denti, A. Dovier, and A. Omicini. Extending Logic Programming with Labelled Variables: Model and Semantics. Fundamenta Informaticae, 161(1-2):53-74, 2018. [15 citations]
23. A. Dovier and R. Giacobazzi. Fondamenti dell'informatica Linguaggi formali, calcolabilità e complessità. Bollati-Boringhieri, 2020. [Italian Textbook]
24. A. Burigana, F. Fabiano, A. Dovier, and E. Pontelli. Modelling multi-agent epistemic planning in ASP. Theory and Practice of Logic Programming 20(5):593-608 (2020) [16 citations]
25. A. Dovier, A. Formisano, G. Gupta, M.V. Hermenegildo, E. Pontelli, and R. Rocha. Parallel Logic Programming: A Sequel. Theory and Practice of Logic Programming. 22(6): 905-973 (2022). [6 citations]