

# Luca Di Gaspero

Department of Electrical, Management and Mechanical Engineering  
University of Udine, Italy

✉ DIEGM – University of Udine      ☎ +39-0432-558242  
via delle Scienze 208              📠 +39-0432-558451  
I-33100 Udine                          ✉ [luca.digaspero@uniud.it](mailto:luca.digaspero@uniud.it)  
Italy                                      @ <http://www.diegm.uniud.it/digaspero/>

Born: May 24, 1974—Udine, Italy  
Nationality: Italian

## Current position

*Senior lecturer of Information Technology*, University of Udine

## Other affiliations

*Privatdozent in Angewandte Informatik*, Institut für Computergraphik und Algorithmen  
Technische Universität Wien, Austria

## Areas of specialization

Metaheuristics • Combinatorial Optimization • Scheduling & Timetabling

## Areas of competence

Computer Science • Artificial Intelligence • Web Technologies

## Author IDs

Open Researcher and Contributor ID ORCID: [0000-0003-0299-6086](https://orcid.org/0000-0003-0299-6086)  
Thomson Reuter ResearcherID: [A-3315-2009](https://www.researcherid.com/rid/A-3315-2009)  
Elsevier Scopus Author ID: [6505944235](https://orcid.org/6505944235)  
Google Scholar: [fIES7P0AAAAJ](https://scholar.google.com/citations?user=fIES7P0AAAAJ)

## Education and qualifications

### Education

- 1999–2003 **PhD in Computer Science**  
*University of Udine*, Italy  
Supervisor: prof. Andrea Schaerf, University of Udine
- 1993–1998 **Master of Science in Computer Science**  
*University of Udine*, Italy  
Supervisors: prof. Vito Roberto, dr. Vincenzo della Mea

## Professional qualifications

- 2015 **Associate Professor Habilitation (Computer Science)**  
*Italian Ministry of Education, University, and Research*
- 2014 **Habilitation in Angewandte Informatik (Applied Computer Science)**  
*Technische Universität Wien, Austria*
- 2013 **Associate Professor Habilitation (Information Technology)**  
*Italian Ministry of Education, University, and Research*
- 2003 **Habilitation as Professional Information Engineer**  
*University of Udine, Italy*

## Appointments held

### Research

- 2005–present **Senior lecturer of information technology (current position)**  
*University of Udine, Italy*  
Department of Electrical, Mechanical and Management Engineering
- 2005–2008 **Lecturer of information technology**  
*University of Udine, Italy*  
Department of Electrical, Mechanical and Management Engineering
- 2003–2005 **Research fellow**  
*University of Udine, Italy*  
Department of Electrical, Mechanical and Management Engineering

### Visits to research institutions

- 2011 **Technische Universität Wien, Austria (2.5 months)**  
*Institut für Computergraphik und Algorithmen*  
Guest Professor for the Summer Semester 2011, hosted by prof. Günther Raidl
- 2004 **Technische Universität Graz, Austria (2 weeks)**  
*Institut für Softwaretechnologie*  
hosted by prof. Wolfgang Slany
- 2000–2001 **Centrum voor Wiskunde en Informatica, Amsterdam, The Netherlands (8 months)**  
*Algorithms, Combinatorics and Optimization group*  
hosted by prof. Krzysztof R. Apt

## Other appointments

- 1998 **Redesign of the students careers DB**  
*University of Udine, Italy*  
Redesign of the students careers DB and platform porting from DBMS DB/2 on IBM AS/400 to Microsoft SQL Server 6.5 on Windows NT

## Teaching

- 2011–present **Web Applications (in English, 6 ECTS)**  
*University of Udine, School of Engineering*  
MS in Information Management Engineering
- 2014–presente **R for statistical analysis of experimental data (4 hours)**  
*University of Udine*  
Phd Programme in Industrial and Information Engineering
- 2011 WS, 2012 WS, 2013 WS **Modeling and Solving Constrained Optimization Problems 186.816 (3 ECTS)**  
*Technische Universität Wien, Austria*  
Facultät für Informatik
- 2011/2012 **C Programming Basics (6 ECTS)**  
*University of Udine, School of Engineering*  
BS in Mechanical Engineering
- 2011 SS **Modeling and Solving Constrained Optimization Problems 186.811 (VU 2.0)**  
*Technische Universität Wien, Austria*  
Facultät für Informatik
- 2009/2010 **Web Technologies (10 ECTS)**  
*University of Udine, School of Educational Sciences*  
BA in Multimedia Sciences and Technologies
- 2003–2009 **Database Systems (5 ECTS)**  
*University of Udine, School of Educational Sciences*  
BA in Multimedia Sciences and Technologies
- 2002–2009 **Server-side Web Programming (3 ECTS)**  
*University of Udine, School of Educational Sciences*  
BA in Multimedia Sciences and Technologies
- 2008 **Programming Mobile Devices (20 hours)**  
*ALFORM (Regional Research and Innovation Network, Friuli–Venezia Giulia)*  
Professional qualification in “ICT Technologies”
- 2001–2005 **C Programming Basics (6 ECTS)**  
*University of Udine, School of Engineering*  
BS in Mechanical/Electronic/Industrial Engineering

- 2003 **Introduction to Server-side Web Programming (2 hours)**  
*University of Udine*, School of Educational Sciences  
 MS in Open & Distance Learning
- 2003 **Computer Architectures Laboratory (60 hours)**  
*University of Udine*, School of Mathematical Sciences  
 BS in Computer Science
- 2003 **Advanced Java Programming techniques (40 hours)**  
*DataConsult s.p.a.*, Pordenone  
 Professional qualification
- 2000 **TA of Semantics of Programming Languages (10 hours)**  
*University of Udine*, School of Mathematical Sciences  
 MS in Computer Science
- 1999 **Introduction to Programming with Java (10 hours)**  
*University of Udine*, School of Literature and Philosophy  
 MA in Conservation of Cultural Heritage
- 1998 **TA of Network Programming in Java (10 hours)**  
*University of Udine*, School of Mathematical Sciences  
 MS in Computer Science.
- 2000 **Java Object Oriented Programming (24 hours)**  
 Professional qualification for secondary school teachers  
 Istituto Tecnico Commerciale “A. Zanon”, Udine
- 2000 **Java Programming (24 hours)**  
 Professional qualification  
 IAL Udine
- 1999 **Java Programming for the Web (43 hours)**  
 Professional qualification  
 IAL Udine

### **Master Students**

- 2013 **Andrea Mattiuz**  
*Mobile advertising: analisi dello stato dell'arte e sviluppo di un'applicazione (Mobile Advertising: state-of-the-art analysis and development of a case study)*  
 Master in Information Engineering – Università degli Studi di Udine, Italy  
 Supervisor
- 2012 **Ivan Ivezić**  
*Extending the Gecode Framework with Interval Constraint Programming*  
 Master in Computational Intelligence – Technische Universität Wien, Austria  
 Co-supervisor (with prof. Günther Raidl)

- 2006 **Raffaele Cipriano**  
*Un Tool Integrato per il Rostering Ospedaliero (An Integrated Tool for Nurse Rostering)*  
 Master in Computer Science – Università degli Studi di Udine, Italy  
 Winner of one of the four national AICA/Federcomin prizes for the best master thesis in ICT.  
 Co-supervisor (with prof. Agostino Dovier)
- 2005 **Luca Vassena**  
*Inferenze e gestione di contesti nell'architettura MoBe: analisi critica e fattibilità (Inferences and contexts management in the MoBe architecture: critical analysis and feasibility)*  
 Master in Computer Science – Università degli Studi di Udine, Italy  
 Winner of one of the four national AICA/Federcomin prizes for the best master thesis in ICT.  
 Co-supervisor (with prof. Stefano Mizzaro)

## PhD Students

- 2011–present **Tommaso Urli**  
*Machine Learning Techniques applied to algorithm selection in Combinatorial Optimization*  
 Supervisor
- 2007–2010 **Raffaele Cipriano**  
*On the Hybridization of Constraint Programming and Local Search Techniques: Models and Software Tools*  
 Co-supervisor (with prof. Agostino Dovier)

## Research

### Research activities

- 1999–present **Local Search Metaheuristics in combinatorial optimization**  
 Starting from my graduate studies [T2], my principal research interest consists on the application of local search metaheuristics to various combinatorial optimization problems, mainly in the fields of Scheduling [IB18, IB20, CI34, IJ15] and Timetabling [IB23, CI41, CI37, IB21]. Other problems taken into account (also with different metaheuristics) were in the fields of computational finance [CI17, IB12], computational genomics [IJ14, CI12], virtual reality [IB10], and sustainable mobility [CI4, CI5].
- 2006–present **Statistical analysis of local search metaheuristics**  
 A recent research line I am pursuing concerns the statistical analysis of some fundamental components of local search algorithms.  
 In [CI22] a statistical analysis of tabu search features on an algorithm for Graph Coloring and Examination Timetabling Problems is presented. [CI24]. In [CI10, CI11], instead, there is an analysis of tabu search applied to Course Timetabling problems. The analysis has been conducted through a novel design of experiments (based on Non-Orthogonal Latin Hypercubes) and the data has been analyzed by means of Response-Surface Analyses.  
 A similar work for the simulated annealing algorithm applied to the Generalized Balanced Academic Curriculum Problem has been reported in [IB11].

- 2006–present **Hybridization of local search**  
I investigated the hybridization of local search with other search paradigms such as Constraint Programming [IB16, IB6, CI5], Quadratic Programming [CI17, IB12], and (Integer) Linear Programming.
- 2002–present **Software tools for metaheuristics**  
I worked in the development of an object-oriented software framework for local search called *EasyLocal++* [IJ19] and of a set of tools for easing the development [IB14] and the experimental analysis of local search algorithms [IB13].  
[IB5] presents an object-oriented software framework for genetic algorithms.
- 2005–2010 **Context-aware applications for mobile devices**  
I took part in the design of a software architecture for the retrieval and execution of context-aware applications on mobile systems [CI26, CI28, CI27]. The complete architecture, called “Context-Aware Browser” has been presented at the 5th International Conference on Prestigious Applications of Intelligent Systems (PAIS 2008) [CI13] and published in IEEE Intelligent Systems [IJ12].
- 2005–2006 **Measures of performance in Information Retrieval**  
I worked in the definition and the experimentation of an Information Retrieval measure called ADM (Average Distance Measure).  
The idea behind ADM [CI31, IB17] is to overcome the usual view of binary relevance/retrieval and to extend these concepts to a continuous case.
- 1997–1998 **Multi-Agent Systems for hypermedia documents**  
During my Master thesis [T3] I worked on an implementation of a Multi-Agent System for the management of hypermedia documents in the telemedicine field, mainly focusing on the knowledge communication and knowledge sharing issues.

### Seminars and tutorials

- 2013 **The EASYLOCAL ecosystem: a set of tool for the development and the analysis of Local Search algorithms**  
*Johannes Kepler Universität Linz, Austria*  
Department of Production and Logistics Management
- 2013 **The EASYLOCAL ecosystem: a set of tool for the development and the analysis of Local Search algorithms**  
*Universität Wien, Austria*  
Department of Business Studies
- 2010 **The Context Aware Browser**  
*Rijksuniversiteit Groningen, The Netherlands*  
Instituut voor Wiskunde en Informatica
- 2007 **An overview of software framework for SLS methods (Invited tutorial)**  
*International workshop SLS 2007 – Engineering Stochastic Local Search – Designing, Implementing and Analyzing, Effective Heuristics, Brussels, Belgium*
- 2005 **Local Search meta-heuristics for combinatorial problems**  
*Università degli Studi “G. D’Annunzio”, Pescara, Italy*  
Dipartimento di Scienze

- 2004 **EASYLOCAL++: an object-oriented framework for flexible design of local search algorithms**  
*Technische Universität Graz, Austria*  
Institut für Software Technology
- 2003 **EASYLOCAL++: an object-oriented framework for flexible design of local search algorithms**  
*Università degli Studi di Trieste, Italy*  
Dipartimento di Elettronica, Elettrotecnica e Informatica
- 2002 **EASYLOCAL++: an object-oriented framework for flexible design of local search algorithms**  
*Università degli Studi di Udine, Italy*  
Dipartimento di Ingegneria Elettrica, Gestionale e Meccanica
- 2002 **EASYLOCAL++: an object-oriented framework for flexible design of local search algorithms**  
*Università degli Studi "G. D'Annunzio", Pescara, Italy*  
Dipartimento di Scienze
- 2001 **The development of Local Search algorithms using EasyLocal++**  
*Università degli Studi di Udine, Italy*  
Dipartimento di Matematica e Informatica
- 2001 **God saves the Queen(s)?**  
Capitan Araña session  
*Centrum voor Wiskunde en Informatica, Amsterdam, The Netherlands*
- 2000 **Local Search Techniques and Tools forCSPs**  
Logic & Constraints Seminar series *Centrum voor Wiskunde en Informatica, Amsterdam, the Netherlands*
- 2000 **Multiagent Systems & Search**  
*Università degli Studi di Udine, Italy*  
Dipartimento di Matematica e Informatica
- 2000 **SAT algorithms in multi-valued propositional logics**  
*Università degli Studi di Udine, Italy*  
Dipartimento di Matematica e Informatica

## Software and data made available to the Scientific Community

### Software

- 2008–present **TTP validator**  
A web validator for solutions of the Traveling Tournament Problem (available at <http://satt.diegm.uniud.it/ttp>)
- 2007–present **QUADPROG++**  
A C++ implementation of the Goldfarb-Idnani dual active set algorithm for quadratic programming problems
- 2006–present **CB-CTT Problem Management System**  
A web application for instance and solution validation, described in [IJ7]
- 2003–present **EASYLOCAL++**  
A C++ framework for local search whose aim is to simplify the implementation of local search algorithms

### Problem instances

- 2006 **CourseTT**  
A dataset for the Course Timetabling problem employed in [IJ18]
- 2007 **ITC-2007**  
A dataset for the Course Timetabling problem, employed in the Second International Timetabling Competition (ITC-2007)
- 2010 **Portfolio**  
A dataset of real stock-exchange data (2001-2006) for the Portfolio Selection problem for a problem currently under investigation

### Participation in scientific projects

- 2013–present **Study and development of methodologies, algorithms, and software for process optimization of ready-mixed concrete delivery (Principal investigator)**  
finanziato da *Ateikon S.r.l.*, Treviso, Italy
- 2007–2011 **EasyCourse (Co-investigator)**  
funded by *EasyStaff S.r.l.*, Udine, Italy
- 2006–2007 **Intelligent Mobile Devices through Interconnected Ambients (Principal investigator)**  
funded by *C.R.S. S.r.l.*, Gemona, Italy
- 2006–2007 **Intelligent Mobile Devices through Interconnected Ambients (Principal investigator)**  
funded by *C.R.S. S.r.l.*, Gemona, Italy
- 2006–2007 **Design and Development of an Open Source Geomarketing Infrastructure within the Regional Open Source Community (Co-investigator)**  
funded by *OverIT S.r.l.*, Fiume Veneto, Italy  
Joint project with dr. Stefano Mizzaro, Department of Mathematics and Computer Science, University of Udine, Italy
- 2005–2006 **Design and Development of a new technology based on the “Cluster Model” for the automation and optimization of “Field Service” processes in a Customer Interaction Management Architecture (Co-investigator)**  
funded by *OverIT S.r.l.*, Fiume Veneto, Italy  
Joint project with dr. Stefano Mizzaro, Department of Mathematics and Computer Science, University of Udine, Italy
- 2004–2005 **Autoadaptive system for mobile communication devices through residential ambients (Co-investigator)**  
funded by *C.R.S. S.r.l.*, Gemona, Italy  
Joint project with drs. Paolo Coppola, Vincenzo Della Mea, Stefano Mizzaro and Ivan Scagnetto, Department of Mathematics and Computer Science, University of Udine, Italy



- 2003–2005 **Design and implementation of a solver based on local search for the execution of declarative specifications for combinatorial problems** ([Investigator](#))  
funded by the *Italian Ministry of University and Research* under grant PRIN 2003  
Coordinator prof. Marco Cadoli, University of Rome “La Sapienza”
- 2003–2004 **Floating Automotive Data Collection** ([Co-investigator](#))  
funded by the *European Commission* under the line Asia ITC  
Joint project with prof. Andrea Schaerf and the Vlaamse Instelling voor Technologisch Onderzoek, Mol, Belgium
- 2003–2004 **EASYLOCAL++ foundation classes** ([1 year PostDoc fellowship](#))  
funded by the *European Social Fund*, Measure D4 – “Improvement of HR in the research and technology development sectors”
- 2000–2001 **Improvements of an object-oriented framework for Local Search** ([Principal investigator](#))  
Young Researchers Project funded by the *University of Udine*, Italy

## Service to the profession

### Advisory

#### Journal reviews

*4OR: A Quarterly Journal of Operations Research* (Springer)  
*Annals of Mathematics and Artificial Intelligence* (Springer)  
*Annals of Operations Research* (Springer Netherlands)  
*Applied Soft Computing* (Elsevier)  
*Central European Journal of Operations Research* (Springer)  
*Computer and Operations Research* (Elsevier)  
*Computers & Graphics* (Elsevier)  
*Computers & Industrial Engineering* (Elsevier)  
*Constraints: an International Journal* (Springer Netherlands)  
*Discrete Applied Mathematics* (Elsevier)  
*European Journal of Operational Research* (Elsevier)  
*IEEE Transaction on Evolutionary Computation* (IEEE Press)  
*IEEE Transaction on Systems, Man and Cybernetics* (IEEE Press)  
*Information Society* (Routledge)  
*Information & Software Technology* (Elsevier)  
*INFORMS Journal on Computing* (INFORMS Computing Society)  
*International Journal of Computational Intelligence Research* (Research India Publications)  
*International Journal of Operations Research* (Interscience publishers)  
*International Transactions in Operational Research* (Blackwell publishing)  
*Journal of Artificial Intelligence Research* (AI Access Foundation)  
*Journal of Global Optimization* (Springer Netherlands)  
*Journal of Heuristics* (Springer US)  
*Journal of Mathematical Modeling and Algorithms* (Springer Netherlands)  
*Memetic Computing* (Springer)  
*Operations Research Letters* (Elsevier)  
*Personal and Ubiquitous Computing* (Springer London)

*Quantitative Finance* (Taylor & Francis)  
*Soft Computing* (Springer)  
*Swarm Intelligence* (Springer US)  
*Transportation Science* (INFORMS Computing Society)

**Program Committee membership**

- 2005–2016 **HM**  
*International Workshop on Hybrid Metaheuristics*
- 2012–2016 **PPSN (biannual)**  
*International Conference on Parallel Problem Solving from Nature*
- 2009–2016 **GECCO – Tracks on (Evolutionary) Combinatorial Optimization (and Metaheuristics)**  
*Genetic and Evolutionary Computation Conference*
- 2008–2014 **PATAT (biannual)**  
*International Conference on Practice and Theory of Automated Timetabling*
- 2012–2014 **ANTS (biannual)**  
*International Conference on Swarm Intelligence*
- 2010–2015 **LION**  
*International Workshop on Learning and Intelligent Optimization*
- 2014 **ICSIBO 2014**  
*International Conference on Swarm Intelligence Based Optimization*
- 2009–2015 **MIC (biannual)**  
*Metaheuristics International Conference*
- 2011 **IJCAI 2011**  
*22nd International Joint Conference on Artificial Intelligence*
- 2007–2011 **SLS (biannual)**  
*International Workshop on Engineering Stochastic Local Search Algorithms*
- 2009 **ISDA 2009**  
*9th International Conference on Intelligent System Design and Application*
- 2008 **HIS 2008**  
*8th International Conference on Hybrid Intelligent Systems 2008*
- 2006,2008 **RCRA**  
RCRA workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion
- 2006 **LSCS 2006**  
*1st International Workshop on Local Search Techniques in Constraint Satisfaction*

**Conference reviews**

- 2016 **AAAI 2016**  
*30th AAAI Conference on Artificial Intelligence*

- 2015 **IJCAI 2015**  
*24th International Joint Conference on Artificial Intelligence*
- 2015 **CP 2015**  
*21st International Conference on Principles and Practice of Constraint Programming*
- 2011 **SEA 2011**  
*10th International Symposium on Experimental Algorithms 2011*
- 2009 **PPDP 2009**  
*11th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming* 10th International Symposium on Experimental Algorithms 2011
- 2008 **ICLP 2008**  
*24th International Conference on Logic Programming*
- 2007 **AAAI 2007**  
*22nd AAAI Conference on Artificial Intelligence*
- 2006 **MICAI 2006**  
*5th Mexican International Conference on Artificial Intelligence*
- 2005 **MIC 2005**  
*6th Metaheuristics International Conference*
- 2005 **ICTA 2005**  
*5th International Conference on Technology and Automation*
- 2003 **IJCAI 2003**  
*18th International Joint Conference on Artificial Intelligence*
- 2002 **ICALP 2002**  
*International Colloquium on Automata, Languages and Programming*

### **Organization of scientific events**

- 2016 **PATAT 2016** (General Co-chair)  
*11th International Conference on Practice and Theory of Automated Timetabling*
- 2011 **MIC 2011** (General Co-chair)  
*9th Metaheuristics International Conference*
- 2011 **ITC-2011** (Co-organizer)  
*Third International Timetabling Competition*
- 2009 **HM 2009** (General co-chair)  
*6th International workshop on Hybrid Metaheuristics*
- 2008 **RCRA 2008** (Local organizer)  
*15th RCRA workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion*

- 2008 **ICLP 2008** (Member of the local organization committee)  
*24th International Conference on Logic Programming*
- 2007 **ITC-2007** (Track Co-organizer)  
*Second International Timetabling Competition*
- 2003 **Mobile HCI 2003** (Member of the local organization committee)  
*5th International Symposium on Human Computer Interaction with Mobile Devices and Services*
- 2002 **WFLP 2002** (Member of the local organization committee)  
*11th International Workshop on Functional and (constraint) Logic Programming*

### **Evaluation Panel of Research Activity Prizes**

- 2015 Member of the evaluation panel for the prize **Dissertationspreis und Diplomarbeitspreis 2015 für Operations Research** granted by the Österreichische Gesellschaft für Operations Research (ÖGOR).

### **Evaluation of research projects**

- 2015 **Research Proposal Evaluator *ex-ante***  
for the University of Verona, Italy  
call Joint Projects
- 2015 **Research Proposal Evaluator *ex-post***  
for the Autonomous Province of Trento, Italy  
call FESR 2/2011
- 2013 **Research Proposal Evaluator *ex-ante***  
for the Fonds Wetenschappelijk Onderzoek, Belgium
- 2013 **Research Proposal Evaluator *ex-ante***  
for the Autonomous Province of Trento, Italy  
call Provincial Law 6/1999, 2013
- 2012 **Research Proposal Evaluator *ex-ante***  
for the Autonomous Province of Trento, Italy  
calls POR/FESR, 2012 and Provincial Law 6/1999, 2012
- 2012 **Research Proposal Evaluator *ex-post***  
for the Autonomous Province of Trento, Italy  
call Provincial Law 6/1999, 2010
- 2009–2010 **Research Proposal Evaluator *ex-ante***  
for the Autonomous Province of Trento, Italy  
calls POR/FESR, 2009 and Provincial Law 6/1999, 2010

## Doctoral program board membership

- 2009–present **Doctoral programme in Industrial and Information Engineering**  
*University of Udine, Italy*  
Member of the board of the doctoral program

## Affiliations

- 2001–present **EU/ME**  
*European Chapter on Metaheuristics*
- 1999–present **AI\*IA**  
*Italian Association for Artificial Intelligence*
- 2000–present **WATT**  
*Working Group on Automated Timetabling*
- 2014–presente **ACP**  
*Association for Constraint Programming*

## Other activities and skills

### Entrepreneurial activity

- 2006–present **MoBe s.r.l. (co-owner)**  
Spin-off of the University of Udine specializing in R&D on context-aware software for mobile devices

### Editor of book italian translations

- 2004 B. Eckel *Thinking in Java (seconda edizione)* (801pp.) Italian translation edited by **Luca Di Gaspero** and Gianluca Franco. Apogeo, Milano. ISBN 88-503-2144-9 (original title *Thinking in Java (3rd ed.)*, Pearson Education, Upper Saddle River, USA).
- 2002 M. Page-Jones. *Fondamenti di progettazione orientata agli oggetti in UML* (384pp.) Italian translation edited by **Luca Di Gaspero** and Stefano Mizzaro. Apogeo, Milano. ISBN 88-7303-803-4 (original title *Fundamentals of Object-Oriented Design In UML*, Addison Wesley, New York, USA).
- 2001 H.M. Deitel, P.J. Deitel. *C++ Tecniche avanzate di programmazione* (388pp.) Italian translation edited by **Luca Di Gaspero**. Apogeo, Milano. ISBN 88-7303-670-8. (original title *C++ How to Program, 3/e*, Prentice Hall Inc., Upper Saddle River, New Jersey, USA).
- 2000 H.M. Deitel, P.J. Deitel. *C++ Fondamenti di programmazione* (670pp.) Italian translation edited by **Luca Di Gaspero**. Apogeo, Milano. ISBN 88-7303-731-3 (original title *C++ How to Program, 3/e*, Prentice Hall Inc., Upper Saddle River, New Jersey, USA).

## IT & Programming skills

Programming languages (C, C++, Java, Pascal, Prolog)  
Markup languages and markup related technologies (XHTML, CSS, XML, XSD, XSLT, XPath)  
Scripting languages (PHP, Ruby, Python, shell script, JavaScript)  
DB Query languages (SQL)  
Statistical analysis (R)  
IP and CP modeling (ILOG Concert, Gecode)  
Revision control (Git, Subversion)  
Digital typesetting ( $\text{\TeX}$ ,  $\text{\LaTeX}$ )  
Server administration (Apache)

## Languages

- *Italian*: [Native Speaker](#)
- *English*: [Advanced C1](#)
- *German*: [Elementary A2](#)
- *Dutch*: [Beginner A1](#)

## Bibliometric indexes

Numero totale di articoli	111
Numero totale di citazioni	1764
Numero medio di citazioni per anno	103.76
Numero medio di citazioni per articolo	15.89
Numero medio di citazioni per autore	697.22
Numero medio di citazioni per autore per anno	41.01
<i>h</i> -index	21
<i>g</i> -index	39
<i>e</i> -index	28.95
<i>h<sub>c</sub></i> -index	17
Individual <i>h</i> -index	6.58
Normalized individual <i>h</i> -index	11
<i>h<sub>m</sub></i> -index	12.80
Age-weighted index (AW-index)	16.60
Age-weighted citation rate (AWCR)	275.54
Age-weighted citation rate per author (AWCRpA)	95.23

The previous indexes have been computed by means of the [Publish or Perish](#) software on 9 novembre 2015, using Google Scholar as data source. The data is verifiable with the query “*Di Gaspero*”, excluding “*G Di Gaspero*” and “*M Gaspero*”.

## Scientific assessment

The scientific assessment of my research activity in the years 2004–2008 and 2006–2010 has been performed by the University of Udine. The analysis considered several Thomson Reuters Web of Science datasets, even though the relevant ones with respect to my research are Science Citation Index Expanded and Conference Proceedings. Moreover, two quality indicators were taken into account. The first one is the Journal Impact Index (JII), i.e., the ratio between the

journal impact factor and the median value of all journals in a subject category. The second indicator is the Article Impact Index (AII), i.e., the ratio between the number of citations of a publication and the median value of all publications in the same subject category in that year. According to this assessment, my research has been evaluated as illustrated in the following table. The ranking has been computed with respect to *all the italian* scientists in the same research field (Information Technologies).

Indicatore	2004–2008	2006–2010
	Percentile	Percentile
Numero totale di articoli	87.1%	81.8%
Numero di articoli pesato per il contributo (numero di autori, posizione degli autori, ecc.)	90.4%	82.3%
Numero di articoli pesato per JII	62.5%	64.9%
Numero di articoli pesato per JII e contributo	70.8%	60.4%
Rapporto fra il numero di articoli pesato per JII e il numero totale di articoli	41.7%	47.1%
Numero di articoli pesato per AII	80.4%	89.3%
Numero di articoli pesato per AII e contributo	86.7%	86.4%
Rapporto fra il numero di articoli pesato per AII e il numero totale di articoli	67.1%	82.9%

## Publications

The publications are presented in reversed chronological order and are grouped by publication type. All publications, except [CI38, CI23] have been peer-reviewed.

### International Journals

- [IJ1] M. Sortino, S. Belfio, G. Totis, L. Di Gaspero, and M. Nali. An investigation on swarm intelligence methods for the optimization of complex part programs in cnc turning. *International Journal of Advanced Manufacturing Technology*, 2105. doi:[10.1007/s00170-015-7011-8](https://doi.org/10.1007/s00170-015-7011-8). Online first.
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