



MARCO CHIARANDINI

CURRICULUM VITÆ as of August 2011

PERSONAL INFORMATION

Date and place of birth	September 16, 1975. Udine, Italy.
Nationality	Italian
Working Address	Department of Mathematics and Computer Science (IMADA, Danish acronym) University of Southern Denmark, Odense Campusvej 55, DK-5230 Odense M, Denmark Telephone: +45 6550 4031 Mobile: +45 2643 2231 Fax: +45 6550 2325 Email: marco@imada.sdu.dk Web: http://www.imada.sdu.dk/~marco
Current position	Associate professor in Computer Science
Areas of specialization	Heuristics for Combinatorial Optimization • Scheduling & Timetabling in the Industrial and Educational Sector • Statistical Methods for Computer Science
Areas of competence	Operations Research • Artificial Intelligence

ACADEMIC POSITIONS

Apr. 2011 - current	Associate Professor Dept. of Mathematics and Computer Science, University of Southern Denmark, Odense, Denmark.
Feb. 2008 - Mar. 2011	Assistant Professor Dept. of Mathematics and Computer Science, University of Southern Denmark, Odense, Denmark.
Jul. 2010 - Oct. 2010	Visiting Researcher IRIDIA, Institute of Interdisciplinary Research and Development in Artificial Intelligence, Université Libre de Bruxelles.
Sep. 2005 - Mar. 2008	Post-Doc researcher Dept. of Mathematics and Computer Science, University of Southern Denmark, Odense, Denmark. Supervisor: Prof. Jørgen Bang-Jensen
Dec. 2001 - Aug. 2005	Ph.D. student Intellectics Group, Dept. of Computer Science, Darmstadt University of Technology, Germany. Supervisor: Dr. habil. Thomas Stütze
Sep. 1999 - Mar. 2000	Master student Dept. of Electrical, Management and Mechanical Engineering, University of Udine, Italy. Supervisor: Prof. Andrea Schaerf

MAIN EDUCATION AND QUALIFICATIONS

Dec. 2008 - Dec. 2009	Teacher-Training Programme for Assistant Lecturers at the University of Southern Denmark (<i>Universitetspædagogikum 2009</i>). Internal advisor: Lene M. Favrholt (associate professor at SDU); external advisor: Bodil Ravn (senior lecturer at Odense Katedralskole).
Sep. 2001 - Jul. 2005	Ph.D. in Computer Science, Darmstadt University of Technology, Germany. Dissertation title: <i>Stochastic local search methods for highly constrained combinatorial optimization problems</i> . Supervisors: Dr. habil. Thomas Stützle and Prof. Wolfgang Bibel. Grade: Mit Auszeichnung bestanden (doctor title achieved with distinction).
Jan. 2001	Admission at the Italian Engineers Order (Ordine Italiano Ingegneri) University of Udine, Italy.
Sep. 2000 - Aug. 2001	Civil service at the University of Udine, Italy.
Sep. 1995 - Mar. 2000	Laurea di Dottore in Ingegneria Gestionale con Orientamento Elettronico, Università degli Studi di Udine, Italy. Master Thesis: <i>Un sistema per la pianificazione dei turni del personale di un'azienda mediante tecniche di ricerca locale</i> . Supervisors: Prof. A. Schaerf and Dr. F. Tiozzo. Grade: 110/110 cum laude.
Sep. 1989 - Jul. 1994	High school in scientific studies (Maturità Scientifica), Liceo Scientifico N. Copernico, Udine, Italy.

RESEARCH SCHOOLS ATTENDED

August 2008	Graph Theory Meeting, Sandbjerg, Denmark.
July 2007	Robust Optimization Summer School. Cortina D'Ampezzo, Dolomites, Italy.
June 2006	Summer School on Game Theory in Computer Science, University of Aarhus, Denmark.
March 2003	First International Summer School on Metaheuristics, Tenerife, Canary Islands.
June 2002	School on Operations Research organized by CIRO, Centro Interuniversitario per la Ricerca Operativa, Siena, Italy.

PEDAGOGICAL WORKSHOPS ATTENDED

May 2010	"Projekt i Undervisning: hvorfor og hvordan?" Birgitte Madelung and Hans-Jørgen Kristensen, SDU
January 2009	"Project supervision and facilitation", Anette Kolmos, University of Aalborg
August 2008	"Den gode forelæsning", Birgitta Wallstedt, SDU
June 2007	"Assessment for learning and Teaching to Large Classes", Sally Brown and Phil Race, University of Leeds
April 2006	"Effective University Teaching", Richard M. Felder and Rebecca Brent, Carolina University

TEACHING

	All courses have been taught at the Department of Mathematics and Computer Science of the University of Southern Denmark
2010-2011	<p><i>Introduction to Machine Learning</i> (planned in April-May) (Master level, 5 ECTS, 28 hours lectures & 14 hours exercises)</p> <p><i>Scheduling, Timetabling and Routing</i> (planned in April-May) (Master level, 5 ECTS, 28 hours lectures & 14 hours exercises)</p> <p><i>Modeling and Solving Constrained Optimization Problems</i> (currently ongoing) (Master level, 5 ECTS, 28 hours lectures & 14 hours exercises, 6 students)</p> <p><i>Heuristics for Combinatorial Optimization</i> (Master level, 5 ECTS, 28 hours lectures & 14 hours exercises)</p>
2009-2010	<p><i>Introduction to linear and integer programming</i> (Bachelor level, 5 ECTS, 20 hours lectures & 18 hours exercises)</p> <p><i>Scheduling, Timetabling and Routing</i> (PhD level, 10 ECTS, 58 hours lectures & 14 hours exercises)</p> <p><i>Introduction to Artificial Intelligence</i> (Bachelor level, 5 ECTS, 28 hours lectures)</p> <p><i>Heuristics for Combinatorial Optimization</i> (Master level, 5 ECTS, 28 hours lectures)</p>
2008-2009	<p><i>Scheduling, Timetabling and Routing</i> (PhD level, 10 ECTS, 50 hours lectures & 6 hours exercises)</p> <p><i>Metaheuristics</i> (Master level, 5 ECTS, 28 hours lectures)</p> <p><i>Heuristics for Combinatorial Optimization</i> (Master level, 5 ECTS, 28 hours lectures)</p>
2007-2008	<p><i>Scheduling, Timetabling and Routing</i> (PhD level, 10 ECTS, 40 hours lectures)</p> <p><i>Heuristics for Combinatorial Optimization Problems</i> (Master level, 5 ECTS, 30 hours lectures)</p>
2006-2007	<p><i>Scheduling, Timetabling and Routing</i> (PhD level, 10 ECTS, 30 hours lectures)</p> <p><i>Heuristics for Combinatorial Optimization Problems</i> (Master level, 7.5 ECTS, 28 hours lectures)</p>
2005-2006	<i>Local Search Methods: Applications and Engineering</i> (PhD level, 10 ECTS, 28 hours lectures)
Other Activities	<p>Three lectures and two assignments in <i>Introduction in Computer Science</i> in 2009 (Bachelor level, 10 ECTS) and one guest lecture in <i>Philosophy of Science – Computer Science</i> since 2008 (Bachelor level, 5 ECTS)</p> <p>Coordination at IMADA for the course <i>Science Project</i> 2009-2010 and 2010-2011 (Bachelor level, 10 ECTS)</p>
Accounted teaching load at University of Southern Denmark	<p>2009-2010: 511 h corresponding to 1.33 of the due amount</p> <p>2008-2009: 490 h corresponding to 1.27 of the due amount</p> <p>2007-2008: 49 h corresponding to 0.61 as postdoc plus 119 h corresponding to 0.53 as assistant = 1.14 of the due amount</p>

STUDENT SUPERVISION

PhD Students	Niels Hvidberg Kjeldsen, 2009–2012, ErhvervsPhD, “Long Term Planning in the Energy Sector.” The industrial partner is DONG. Prof. Jørgen Bang-Jensen is the main supervisor but I am the person involved in the research project.
Master Students	Arun Vadiveal, starting, “Website Optimization: the TV2 Case”. Anders Helmar, ongoing, “The Sum Coloring and the Equitable Coloring Problems”. Frederik Jensen, ongoing, “Branch and Price for the Set T-coloring Problem”. Kristian W. Jakobsen, February 2011, “Course Timetabling at the Faculty of Science of SDU”. Niels Hvidberg Kjeldsen, 2009, “Long Term Unit Commitment with Heating Constraints”.
Bachelor Students	Jens Christian Steenvinkel Pedersen, August 2010, “Local Search for Elementary Shortest Path Problem with Resource Constraints”. Rasmus Ulvund Svendsen, December 2008, “Rating og Forudsigelse i Europæisk Fodbold”. Kelvin de la Cruz Gam-Jensen, December 2008, “Using Heuristics for Solving the Traveling Umpire Problem”. Kasper Markus, January 2007, “2D Protein Folding”.
Individual Study Activities	Kristian Schmidt, 2009, “ROADEF 2010 Challenge: Local Search for Maintenance Scheduling”. Jesper Nikolajsen, February 2007, “DM84, Project on Course Timetabling”.

RESEARCH INTERESTS

Operations research applications in the industrial and public sector
Heuristic algorithms for optimization
Statistical analysis of optimization algorithms
Statistical learning applications
Automatic tuning of optimization algorithms
Computational studies

ACHIEVEMENTS AND FELLOWSHIPS

2007	Member of the team that ranked third in the Second International Timetabling Competition organized by PATAT, http://www.idsia.ch/Files/ttcomp2002/ . (Joint work with H. Hoos and C. Fawcett from the University of British Columbia.)
2005	Member of the team that ranked third in the final phase of the ROADEF’2005 challenge, http://www.prism.uvsq.fr/~vdc/ROADEF/CHALLENGES/2005/ . (Joint work at the Intellectics Group of the Darmstadt University of Technology.)
2003	Member of the team that ranked first out of 24 in the First International Timetabling Competition organized by the Metaheuristics Network and sponsored by PATAT http://www.idsia.ch/Files/ttcomp2002/ . (Joint work with M. Birattari and K. Socha from IRIDIA, Université Libre de Bruxelles and O. Rossi-Doria from the School of Computing, Napier University.)
Dec. 2001 - Aug. 2004	Member of the Metaheuristics Network, a Research Training Network funded by the Improving Human Potential Programme of the European Community.

RESEARCH GRANTS

June 2010	Awarded by the Danish Council for Independent Research Natural Sciences (FNU) for a research stay abroad. Title of the project: “Automatic Configuration and Tuning of Optimization Algorithms.” Amount: 120.384 Dkk.
July 2009	Awarded by the Fabrikant Mads Clausens Fond. Title of the the project “Efficient Algorithms for Optimization.” Amount: 30.000 Dkk.
May 2009	Awarded by Lundbeck Fonden for travelling expenses. Title: “Participation to the Second International Workshop of the ERCIM Working Group on Computing & Statistics”. Amount: 8.286 Dkk.
Jan. 2010 - Dec. 2012	Member of a joint research project including four universities (Stort Forskningsprojekt) funded by the Danish Council for Independent Research Natural Sciences (FNU). Title of the project: “Research activities in Discrete Mathematics”. Main investigator: Prof. Carsten Thomassen, Technical University of Denmark. Amount: 4.470.129 Dkk administrated by the Technical University of Denmark.

TALKS AND TUTORIALS

	Extended abstracts and regular papers appear also later in the publication list as conference proceedings. Simple abstract were instead not published in proceedings and hence do not appear in the publication list.
May 2010	SEA, 9th International Symposium on Experimental Algorithms, Naples, Italy (Regular paper)
Jan. 2010	LION 4, Learning and Intelligent OptimizatioN, Venice, Italy (Abstract)
Oct. 2009	Second Workshop of the ERCIM Working Group on Computing & Statistics, Limassol, Cyprus (Abstract)
Jul. 2009	EURO XXIII European Conference on Operational Research. Bonn, Germany (Abstract)
Oct. 2008	“Experimental Analysis of Optimization Heuristics” at the Workshop on Computational Optimization Methods in Statistics, Econometrics and Finance, Raischholzhausen, Germany (<i>Invited tutorial</i>)
Dec. 2007	Graph Theory Meeting, Fredericia, Denmark (Abstract)
Dec. 2007	Workshop on Algorithms, Christian-Albrechts-Universität zu Kiel, Germany (Extended abstract)
Sep. 2007	“Empirical methods for the analysis of algorithms” at the Workshop on Engineering Stochastic Local Search Algorithms, Brussels, Belgium (<i>Invited tutorial</i>)
Sep. 2007	Workshop on Engineering Stochastic Local Search Algorithms, Brussels, Belgium (Regular paper)
Jul. 2007	EURO XXII European Conference on Operational Research. Prague, Czech Republic (Abstract)
Sep. 2006	Annual Conference of the Italian Operational Research Society. Edition XXXVII in Cesena, Italy (Abstract)
Aug. 2006	Matheuristics 2006, First Workshop on Mathematical Contributions to Metaheuristics, Bertinoro, Italy (Abstract)

Dec. 2005	Graph Theory Meeting, Nyborg, Denmark (Abstract)
Sep. 2005	Annual Conference of the Italian Operational Research Society. Edition XXXVI in Camerino, Italy (Abstract)
Aug. 2005	Metaheuristics International Conference, Sixth Edition, Vienna, Austria (Extended abstract)
Sep. 2002	Computational Symposium on Graph Colouring and its Generalisations held in conjunction with Constraint Programming 2002 at Cornell University, Ithaca, NY, USA (Regular paper)
2002 - 2004	Research presentation within the Metaheuristics Network. The activities comprised a total of 8 Network meetings, including workshops, milestone assessment and visits to industrial partners.

PROFESSIONAL SERVICE

Membership in Program Committees of International Conferences	<p><i>GECCO 2011 – Genetic and Evolutionary Computation Conference, Track on Real World Applications</i>, Dublin, Ireland, Jul. 2011.</p> <p><i>MIC 2011 – Metaheuristics International Conference</i>, Udine, Italy, Jul. 2011.</p> <p><i>HM 2010 – Hybrid Metaheuristics</i>, Vienna, Austria, Oct. 2010.</p> <p><i>ANTS 2010 – Ant Colony Optimization and Swarm Intelligence</i>, Belgium, Sep. 2010.</p> <p><i>GECCO 2010 – Genetic and Evolutionary Computation Conference, Track on Combinatorial Optimization Problems</i>, Portland, Oregon, 2010.</p> <p><i>SLS 2009 – Engineering Stochastic Local Search Algorithms</i>, Belgium, Sep. 2009.</p> <p><i>HM 2009 – Hybrid Metaheuristics</i>, Italy, Oct. 2009</p> <p><i>GECCO 2009 – Genetic and Evolutionary Computation Conference</i>, Canada, Jul. 2009.</p> <p><i>ANTS 2008 – Ant Colony Optimization and Swarm Intelligence</i>, Belgium, Sep. 2008.</p> <p><i>SLS 2007 – Engineering Stochastic Local Search Algorithms</i>, Belgium, Sep. 2007.</p> <p><i>HM 2007 – Hybrid Metaheuristics</i>, Germany, Oct. 2007.</p> <p><i>ANTS 2006 – Ant Colony Optimization and Swarm Intelligence</i>, Belgium, Sep. 2006.</p>
Reviews for International Journals	<p><i>Computers & Operations Research</i> (Elsevier)</p> <p><i>Journal of Heuristics</i> (Springer)</p> <p><i>Swarm Intelligence</i> (Springer)</p> <p><i>Annals of Operations Research</i> (Springer)</p> <p><i>Networks</i> (Wiley)</p> <p><i>Journal on Computing</i> (INFORMS)</p> <p><i>OMEGA</i> (Elsevier)</p> <p><i>International Journal of Production Research</i> (Taylor & Francis)</p> <p><i>Journal of Combinatorial Optimization</i> (Springer)</p> <p><i>AI Communications</i> (IOS Press)</p> <p><i>Systems, Man and Cybernetics - Part B</i>, (IEEE Press)</p> <p><i>IEEE Transactions on Evolutionary Computation</i> (IEEE Press)</p> <p><i>Computers and Mathematics with Applications</i> (Elsevier)</p> <p><i>Journal of Artificial Evolution Applications</i> (Hindawi Publishing Corporation)</p> <p><i>Mathematical Problems in Engineering</i> (Hindawi Publishing Corporation)</p> <p><i>Advances in the Design of Evolutionary Algorithms</i> (edited book, Springer)</p> <p><i>The R Journal</i> (R project)</p>

Reviews for International Conferences and Workshops	<p><i>SEA 2011</i>, 10th International Symposium on Experimental Algorithms 2011, Kolimpari Chania, Greece</p> <p><i>CPAIOR 2010</i>, International Conference on Integration of Artificial Intelligence (AI) and Operations Research (OR) techniques in Constraint Programming, Bologna, Italy.</p> <p><i>SEA 2009</i>, 8th International Symposium on Experimental Algorithms SEA 2009, Dortmund, Germany.</p> <p><i>WCCI 2008</i>, IEEE World Congress on Computational Intelligence, Hong Kong.</p> <p><i>WEA 2007</i>, 6th Workshop on Experimental Algorithms, Rome, Italy.</p> <p><i>GECCO 2007</i>, Genetic and Evolutionary Computation Conference, London, UK.</p> <p><i>ESA 2006</i>, 14th Annual European Symposium on Algorithms, Zürich, Switzerland.</p> <p><i>ORP3 2005</i>, A EURO Conference for young OR researchers, Valencia, Spain.</p>
Organization of Scientific Events	<p>Co-organizer of the Workshop on Experimental Methods for the Assessment of Computational Systems, in conjunction with the International Conference on Parallel Problem Solving From Nature (PPSN), Krakow, Poland, 2010.</p> <p>Co-organizer of the Workshop on “Empirical Methods for the Analysis of Algorithms” in conjunction with the International Conference on Parallel Problem Solving From Nature (PPSN IX), Reykjavik, Iceland, 2006.</p>
Evaluation of Research Proposals	<p>PhD application at the Fonds National de la Recherche, Luxembourg Government</p> <p>Book proposal for Oxford University Press</p> <p>Book proposal for Bentham Science Publishers</p>
Affiliations and Memberships	<p>EU/ME European Chapter on Metaheuristics</p> <p>WATT Working Group on Automated Timetabling</p> <p>Dansk Selskab for Operationsanalyse (DORS)</p> <p>Dansk Universitetspædagogisk Netværk</p>

COLLABORATIONS WITH INDUSTRY AND PUBLIC SECTOR

2008-2012	Supervision of a master and industrial PhD student on long term planning in the energy sector. The industrial partner is DONG Energy, Denmark. The collaboration resulted in publication [WP.1].
2010	Supervision of a master student in the development of a software for the timetabling of courses at the Faculty of Science of the University of Southern Denmark.
2006-2007	Participation in a project with Bang and Olufsen for optimizing the movement of cranes in an anodizing plant. The results of the project are still to be published [WP.3].
2004	Two week stay at Eurobios, consultancy firm in Paris, France, working at the optimization of train timetable. The collaboration was part of the Metaheuristics Network programme.
2000	Development of a system for an employee timetabling case specified by a consultancy firm, Cybertex, Trieste, Italy. This work became my Master thesis [TH.1] and led to a joint international publication [CP.1].

SOFTWARE AND DATA MADE AVAILABLE TO THE SCIENTIFIC COMMUNITY

2011–present	Learning graphical models for parameter tuning. An R package. (www.imada.sdu.dk/~marco/lgmpt)
2011–present	Graphical tools for empirical attainment function of random sets. An R Package. In collaboration with C. Fonseca, M. López-Ibáñez, M. Chiarandini, L. Paquete, T. Stützle (to appear http://cran.r-project.org/)
2010–present	Heuristics and metaheuristics for graph coloring. (www.imada.sdu.dk/~marco/gcp-study)
2007–present	Data set for the 2-Edge-Connectivity Augmentation Problem (www.imada.sdu.dk/~marco/e12aug)

OTHER ACTIVITIES AND COMPETENCES

Administration since 2008	Scheduling of elective courses at the Department of Mathematics and Computer Science. A description of the problem solved by integer programming is available at http://www.imada.sdu.dk/~marco/Timetables/Documentation/ .
Languages	Italian (mother language), English (proficient user), Danish (Independent user), German (basic user), French (basic user)
Programming Skills	Programming languages (C, C++) Markup languages (HTML, CSS) Scripting languages (Perl, Python, shell script) Statistical and mathematical software (R) IP and CP modeling (ZIMPL, Gecode, Comet) Revision control (Subversion) Digital Typesetting (\LaTeX)

The publications are presented in reversed chronological order and are grouped by publication type. All publications, except those in the section Technical Reports and Work in Progress, have been peer-reviewed. The list with links to electronic versions is available online at my homepage.

International Journals:

- IJ.8 N. H. Kjeldsen, M. Chiarandini (2012). Heuristic solutions to the long-term unit commitment problem with cogeneration plants. *Computers & Operations Research*, vol. 39, no. 2, pp. 269–282.
- IJ.7 M. Chiarandini, L. Di Gaspero, S. Gualandi, A. Schaerf (2011). The balanced academic curriculum problem revisited. *Journal of Heuristics*, pp. 1–30. Online first.
- IJ.6 J. Bang-Jensen, M. Chiarandini, P. Morling (2010). A computational investigation of heuristic algorithms for 2-edge-connectivity augmentation. *Networks*, vol. 55, no. 4, pp. 299 – 325. Supplementary material available at <http://www.imada.sdu.dk/~marco/e12aug/>. Preliminary version available as *Tech. Rep.* DMF-2007-07-005 at The Danish Mathematical Society.
- IJ.5 M. Chiarandini, I. S. Kotsireas, C. Koukouvinos, L. Paquete (2008). Heuristic algorithms for Hadamard matrices with two circulant cores. *Theoretical Computer Science*, vol. 407, pp. 274–277. Code <http://www.imada.sdu.dk/~marco/Hadamards/ts.c>.
- IJ.4 D. Basso, M. Chiarandini, L. Salmaso (2007). Synchronized permutation tests in $I \times J$ designs. *Journal of Statistical Planning and Inference*, vol. 137, no. 8, pp. 2564–2578.
- IJ.3 M. Chiarandini, T. Stützle (2007). Stochastic local search algorithms for graph set T-colouring and frequency assignment. *Constraints*, vol. 12, no. 3, pp. 371–403.
- IJ.2 L. Bianchi, M. Birattari, M. Chiarandini, M. Manfrin, M. Mastrolilli, L. Paquete, O. Rossi-Doria, T. Schiavinotto (2006). Hybrid metaheuristics for the vehicle routing problem with stochastic demand. *Journal of Mathematical Modelling and Algorithms*, vol. 5, no. 1, pp. 91–110.
- IJ.1 M. Chiarandini, M. Birattari, K. Socha, O. Rossi-Doria (2006). An effective hybrid algorithm for university course timetabling. *Journal of Scheduling*, vol. 9, no. 5, pp. 403–432.

Book Chapters and Post-Conference Proceedings:

- BC.6 T. Bartz-Beielstein, M. Chiarandini, L. Paquete, M. Preuss (2010). Introduction. In T. Bartz-Beielstein, M. Chiarandini, L. Paquete, M. Preuss (Eds.), *Experimental Methods for the Analysis of Optimization Algorithms*, pp. 1–14, Springer, Germany.
- BC.5 M. Chiarandini, Y. Goegebeur (2010). Mixed models for the analysis of optimization algorithms. In T. Bartz-Beielstein, M. Chiarandini, L. Paquete, M. Preuss (Eds.), *Experimental Methods for the Analysis of Optimization Algorithms*, pp. 225–264, Springer, Germany. Preliminary version available as *Tech. Rep.* DMF-2009-07-001 at the The Danish Mathematical Society.
- BC.4 M. Chiarandini, I. Dumitrescu, T. Stützle (2008). Very large-scale neighborhood search: Overview and case studies on coloring problems. In C. Blum, M. J. Blesa, A. Roli, M. Sampels (Eds.), *Hybrid Metaheuristics*, vol. 114 of *Studies in Computational Intelligence*, pp. 117–150, Springer.

- BC.3 M. Chiarandini, I. Dumitrescu, T. Stützle (2007). Stochastic local search algorithms for the graph colouring problem. In T. F. Gonzalez (Ed.), *Handbook of Approximation Algorithms and Metaheuristics*, Computer & Information Science Series, pp. 63.1–63.17, Chapman & Hall/CRC, Boca Raton, FL, USA. Preliminary version available as *Tech. Rep. AIDA-05-03* at Intellectics Group, Computer Science Department, Darmstadt University of Technology, Darmstadt, Germany.
- BC.2 L. Paquete, M. Chiarandini, T. Stützle (2004). Pareto local optimum sets in the biobjective traveling salesman problem: An experimental study. In X. Gandibleux, M. Sevaux, K. Sörensen, V. T'kindt (Eds.), *Metaheuristics for Multiobjective Optimisation*, vol. 535 of *Lecture Notes in Economics and Mathematical Systems*, pp. 177–200, Springer Verlag, Berlin, Germany.
- BC.1 O. Rossi-Doria, M. Samples, M. Birattari, M. Chiarandini, M. Dorigo, L. Gambardella, J. Knowles, M. Manfrin, M. Mastrolilli, B. Paechter, L. Paquete, T. Stützle (2003). A comparison of the performance of different metaheuristics on the timetabling problem. In E. Burke, P. Causmaecker (Eds.), *Practice and Theory of Automated Timetabling*, vol. 2740 of *Lecture Notes in Computer Science*, pp. 329–351, Springer.

Editorial Work:

- EW.4 L. D. Andersen, J. Bang-Jensen, J. Bárát, M. Chiarandini, T. R. Jensen, L. K. Jørgensen, M. Kriesell, A. S. Pedersen, B. Toft (Eds.) (2010). *Special issue dedicated to Carsten Thomassen on his 60th birthday*, vol. 310 of *Discrete Mathematics*.
- EW.3 T. Bartz-Beielstein, M. Chiarandini, L. Paquete, M. Preuss (Eds.) (2010). *Experimental Methods for the Analysis of Optimization Algorithms*. Springer, Germany.
- EW.2 T. Bartz-Beielstein, M. Chiarandini, L. Paquete, M. Preuss (Eds.) (2010). *Proceedings of the Workshop on Experimental Methods for the Assessment of Computational Systems*, Krakow, Poland. Algorithm Engineering Reports, TR10-2-007, Technische Universität Dortmund, Germany.
- EW.1 L. Paquete, M. Chiarandini, D. Basso (Eds.) (2006). *Empirical Methods for the Analysis of Algorithms, Workshop EMAA 2006, Online Proceedings*, Reykjavik, Iceland. (47 pp).

Theses:

- TH.2 M. Chiarandini (2005). Stochastic local search methods for highly constrained combinatorial optimisation problems. Ph.D. thesis, pp. 1–337, Computer Science Department, Darmstadt University of Technology, Darmstadt, Germany.
- TH.1 M. Chiarandini (2000). Un sistema per la pianificazione dei turni del personale di un'azienda mediante tecniche di ricerca locale. Master's thesis, Università degli Studi di Udine, Dipartimento di Ingegneria Elettrica, Gestionale e Meccanica. Supervisors: Prof. Andrea Schaerf and Dr. Fabio Tiozzo. (In Italian).

Conference Proceedings:

- CP.14 M. Chiarandini, G. Galbiati, S. Gualandi (2011). Efficiency issues in the RLF heuristic for graph coloring. In L. D. Gaspero, A. Schaerf, T. Stützle (Eds.), *Proceedings of the 9th Metaheuristics International Conference, MIC 2011*, pp. 461–469, Dipartimento di Ingegneria Elettrica, Gestionale e Meccanica, Università di Udine, Udine, Italy.
- CP.13 A. Helmar, M. Chiarandini (2011). A local search heuristic for chromatic sum. In L. D. Gaspero, A. Schaerf, T. Stützle (Eds.), *Proceedings of the 9th Metaheuristics International Conference, MIC 2011*, pp. 161–170, Dipartimento di Ingegneria Elettrica, Gestionale e Meccanica, Università di Udine, Udine, Italy.

- CP.12 M. Chiarandini (2010). Learning decision trees for the analysis of optimization heuristics. In C. Blum, R. Battiti (Eds.), *Proceedings of Learning and Intelligent Optimization (LION 2010)*, vol. 6073 of *Lecture Notes in Computer Science*, pp. 208–211, Springer.
- CP.11 M. Chiarandini, T. Stützle (2010). An analysis of heuristics for vertex colouring. In P. Festa (Ed.), *Experimental Algorithms, Proceedings of the 9th International Symposium, (SEA 2010)*, vol. 6049 of *Lecture Notes in Computer Science*, pp. 326–337, Springer. Supplementary material and source code available at <http://www.imada.sdu.dk/~marco/gcp-study/>.
- CP.10 A. Schaerf, M. Chiarandini, L. Di Gaspero (2010). Modelling and solving the generalised balanced academic curriculum problem with heterogeneous classes. In *Proceedings of the 8th International Conference on the Practice and Theory of Automated Timetabling (PATAT2010)*, pp. 547–550. Extended abstract.
- CP.9 C. Fawcett, H. H. Hoos, M. Chiarandini (2009). An automatically configured modular algorithm for post enrollment course timetabling. In F. Hutter, M. A. M. de Oca (Eds.), *Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, Technical Report Series, pp. 16–20, IRIDIA, Université Libre de Bruxelles, Brussels, Belgium.
- CP.8 M. Chiarandini, C. Fawcett, H. H. Hoos (2008). A modular multiphase heuristic solver for post enrolment course timetabling. In *Proceedings of the 7th International Conference on the Practice and Theory of Automated Timetabling*, pp. 1–6, Montréal.
- CP.7 J. Bang-Jensen, M. Chiarandini, Y. Goegebeur, B. Jørgensen (2007). Mixed models for the analysis of local search components. In T. Stützle, M. Birattari, H. Hoos (Eds.), *Proceedings of the first International Workshop on Engineering Stochastic Local Search Algorithms (SLS 2007)*, vol. 4638 of *Lecture Notes in Computer Science*, pp. 91–105, Springer.
- CP.6 M. Chiarandini, T. Stützle, K. Larsen (2006). Colour reassignment in tabu search for the graph set T-colouring problem. In F. Almeida, J. M. Moreno, M. Pérez (Eds.), *Proceedings of the third International Workshop on Hybrid Metaheuristics (HM 2006)*, vol. 4030 of *Lecture Notes in Computer Science*, pp. 162–177, Springer Verlag, Berlin, Germany.
- CP.5 L. Di Gaspero, M. Chiarandini, A. Schaerf (2006). A study on the short-term prohibition mechanisms in tabu search. In G. Brewka, S. Coradeschi, A. Perini, P. Traverso (Eds.), *Proc. of the 17th European Conference on Artificial Intelligence (ECAI2006)*, pp. 83–87, IOS Press.
- CP.4 M. Chiarandini, D. Basso, T. Stützle (2005). Statistical methods for the comparison of stochastic optimizers. In K. D. et al. (Ed.), *MIC2005: The Sixth Metaheuristics International Conference*, pp. 189–196, Vienna, Austria.
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