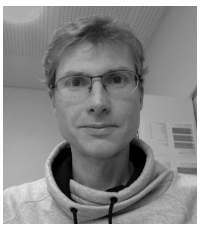

Marco Chiarandini

Curriculum Vitæ as of June 2023

Personal Information

Birth	1975. Udine, Italy.
Nationality	Italian
Civil Status	Single
Work Address	Department of Mathematics and Computer Science (IMADA, Danish acronym) University of Southern Denmark (SDU), Odense Campusvej 55, DK-5230 Odense M, Denmark Telephone: +45 6550 4031 Mobile: +45 5115 2231 Email: marco@imada.sdu.dk Web: http://www.imada.sdu.dk/u/march ORCID: https://orcid.org/0000-0002-6136-8496
Current position	Associate professor in Computer Science
Areas of competence (ACM CCS 2012)	• Computing Methodologies • Applied Computing • Operations Research • Scheduling, Timetabling and Routing in the public and private sectors • Artificial Intelligence • Search and Experimentation Methodologies Mathematics of Computing • Discrete Mathematics • (Combinatorics • Combinatorial optimization | Graph Theory • Graph Coloring)

Main Education and Qualifications

Sep. 2001 - Jul. 2005	Ph.D. in Computer Science, Darmstadt University of Technology, Germany. Dissertation title: *Stochastic local search methods for highly constrained combinatorial optimization problems.* Supervisors: Dr. habil. Thomas Stützle and Prof. Wolfgang Bibel. Grade: Mit Auszeichnung bestanden (doctor title achieved with distinction).
Jan. 2001	Admission to the Italian Engineers Order (Ordine Italiano Ingegneri) University of Udine, Italy.
Sep. 2000 - Aug. 2001	Civil service at the University of Udine, Italy.
Sep. 1994 - Mar. 2000	Master Degree in Electrical, Management and Mechanical Engineering, Università degli Studi di Udine, Italy. Master Thesis: *Un sistema per la pianificazione dei turni del personale di un'azienda mediante tecniche di ricerca locale.* 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.

Previous Academic Positions

Apr. 2011 - present	Associate Professor (Lektor) Dept. of Mathematics and Computer Science, University of Southern Denmark, Odense, Denmark.
Feb. 2008 - Mar. 2011	Assistant Professor (Adjunkt) 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 Stützle
Sep. 1999 - Mar. 2000	Master student Dept. of Electrical, Management and Mechanical Engineering, University of Udine, Italy. Supervisor: Prof. Andrea Schaerf

Other Education

Main Pedagogical Education

2017	Certified for Teaching in English at the University of Southern Denmark. Certified C1 (out of 6 levels, from lowest to highest: A1, A2, B1, B2, C1, C2) in the Common European Framework of Reference for Languages (CEFR).
2009	Teacher-Training Programme for Assistant Lecturers at the University of Southern Denmark (*Universitetspædagogikum 2009*). Internal advisor: Lene M. Favrholdt (associate professor at SDU); external advisor: Bodil Ravn (senior lecturer at Odense Katedralskole).

Pedagogy Workshops Attended

March 2015	"Questioning - how it can support learning, teaching and assessment," Donna Hurford
June 2013	"Body Language in the Teaching Situation" (Kropssprog i undervisningen), Johan Borghäll
October 2013	"Participatory Approaches: enabling active learning" Donna Hurford
January 2012	"Course for PhD Supervison" Monika Janfelt and Dacapo
May 2010	"Project based teaching: why and when?" (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	"The good lecture" (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

Research Schools and Workshops Attended

April 2014	Projektstyring (Project Management), University of Southern Denmark, Denmark (3 ECTS).
August 2012	Data Mining School, Copenhagen, Denmark.
June 2012	Third International Conference on Computational Sustainability (CompSust'12), Copenhagen, Denmark
September 2011	Workshop: New Trends in Mechanism Design, Copenhagen, 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.

Teaching

Overview

All my teaching activity has taken place at the Department of Mathematics and Computer Science of the University of Southern Denmark. Since 2005, I have taught more than 30 courses in computer science. Indicatively, I hold 30 hours lectures and 16 hours exercises for courses of 5 ECTS and 60 hours lectures and 32 hours exercises for courses of 10 ECTS.
The detailed list of courses with teaching material is available from my web page. Sometimes access to previous editions of the courses are restricted but do not hesitate to request me the credentials in case of interest.

Courses

2010, 2012-present	*Linear and Integer Programming* (Bachelor level, 10 ECTS. The course has typically around 45 students, except for year 2014-2015 where there were 75.)
2014 - 2018	*Linear Algebra for Computer Science* (Bachelor level, 10 ECTS. In average 50 students)
2009, 2011, 2021	*Introduction to Artificial Intelligence* (Bachelor level, 5 ECTS)
2010, 2013	*Introduction to Machine Learning* (Master level, 5 ECTS)
2012, 2014	*Artificial Intelligence for Computer Game Programming* (Bachelor level, 5 ECTS)
2013	*Computer architecture* (Bachelor level, 5 ECTS, 45 students)
2017-2019	*Introduction to Programming in C++* (Bachelor level, 5 ECTS. In average 12 students.)
2014-present	*Heuristics and Constraint Programming for Discrete Optimization* (Master level, 10 ECTS. In average 15 students.)
2011, 2012, 2014	*Modeling and Solving Constrained Optimization Problems* (Master level, 5 ECTS)
2006-2011,2014	*Scheduling, Timetabling and Routing* (Phd and Master level, 5 ECTS)
2006, 2012, 2013	*Heuristics for Combinatorial Optimization* (Master level, 5 ECTS)
2008	*Metaheuristics* (Master level, 5 ECTS)
2005-2006	*Local Search Methods: Applications and Engineering* (Master level, 10 ECTS)

Other Teaching Activities

2009-present	Coordination at IMADA for the course *First Year Science Project* (Bachelor level, 10 ECTS)
2012-2016	Lectures on MATLAB programming in the course *Computational Science* (Bachelor level, 8 ECTS)
2008-2014	Guest lecture in the course *Philosophy of Science – Computer Science* (Bachelor level, 5 ECTS)
2013,2014,2016	Supervision of one group in *First Year Science Project*
2009,2016-present	Three lectures and two assignments in *Introduction in Computer Science* (Bachelor level, 10 ECTS)
2011, 2012	Group supervision to Gymnasimum students, *Studieretningsprojekt*

Student Supervision

Since 2007	supervised 3 PhD students, 36 Master thesis projects (60 ECTS), 32 Bachelor projects (15 ECTS) and 21 individual study activities.
PhD Students	Nicklas S. Andersen, 2018-2022, "Spatial Data Science: Applications and Implementations in Learning Human Mobility Patterns.
	Anders Knudsen, 2014-2017, Industrial PhD with Air Support, "Flight Route Optimization".
	Niels Hvidberg Kjeldsen, 2009–2012, Industrial PhD, "Long Term Planning in the Energy Sector." The industrial partner is DONG. (together with prof. Jørgen Bang-Jensen)

Service in the Censor bodies of the Danish University Education System

Appointments	Danish examiner corps for the Bachelor of Science (BSc), Master of Science (MSc) in Engineering programmes and master programmes (continuing education) within the field of Civil - Matematik, Fysik og Samfundsfag (periods 2010-2014, 2014-2018, 2018-2022, 2022-2026)
	Danish examiner corps for the Bachelor of Engineering (BEng) programmes and technical diploma programmes within the field of Diplom and Civil - Bygning (periods 2022 - 2026)
	Danish examiner corps in Computer Science (periods 2015-2019, 2019-2021, 2022-2026)

Administration

2021	Member of the working group for the development of a Bachelor education in Artificial Intelligence at the Department of Mathematics and Compuer Science of SDU
Since 2009	Developer, maintainer and user in practice of an automatic system for the timetabling of courses and exams and for the assignment of students to projects at the Faculty of Science of SDU.

Research 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.)
2001 - 2004	Member of the Metaheuristics Network, a Research Training Network funded by the Improving Human Potential Programme of the European Community.

Research Management and Funding

2023	Local chair for the workshop NordConsNet, the Network of Nordic countries on Constraint Programming, supported with up to 100 thousands krone the Danish Data Science Academy and the Carlsberg Foundation
2019-2021	Principal Investigator in a project for the development of a smartphone app for people with dementia, in collaboration with Nyborg Kommune and TrygFonden, total budget 2,4 mio DKK (of which 1.4 million krone from Trygfonden and 0.4 million krone from the municipality).
2021	Principal Investigator in an SDU e-læringsprojekt to develop an IT infrastructure to facilitate active learning and teaching. Budget 86.975 DKK.
2017-2019	Principal Investigator in a project on Intelligent Traffic Systems in collaboration with Odense Kommune and supported by SDU with 1.1 mio DKK.
2010-present	Various industrial collaborations via supervision of Master thesis projects, eg, FynBus, DSB-S, Schneider Electric, Oe3i, Danpilot, Energinet, ESoft.
2017-2018	Coordination of the project "Intelligent Traffic Systems" in collaboration with Odense Kommune and financed by University of Southern Denmark Amount: 2 mio Danish Krone.
2014-2017	Participation as main supervisor in the industrial PhD project "Flight Route Optimization", financed by the Danish InnovationFonden and Air Support.
2009-2012	Participation as main supervisor in an industrial PhD project "Long Term Planning in the Energy Sector", financed by the Danish InnovationFonden and DONG energy.
December 2013	Awarded by the Danish e-Infrastructure Cooperation with involvement of the Danish Council of Independent Research Title of the project: "Experimental Assessment of Optimization Algorithms for Graph Coloring and Timetabling" Amount: 45.000 Dkk
March 2012	Access granted to free resources of Danish Center for Scientific Computing Title of the project: "Engineering Optimization Algorithms: Methods and Applications"
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.

May 2009	Title of the the project "Efficient Algorithms for Optimization." Amount: 30.000 Dkk. 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.
July 2013 - June 2016	Member of a joint research project including four universities (Rammebevilling, DFF – 1323-00178) funded by the Danish Council for Independent Research | Natural Sciences (FNU). Title of the project: "AlgoDisc - Discrete mathematics, algorithms and data structures". Main investigator: Prof. Carsten Thomassen, Technical University of Denmark. Amount: 6.480.000 Dkk administrated by the Technical University of Denmark.
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.

Professional Service

Reviewer Activity	Reviewer for international conferences such as ANTS, EvoCOP, EMO, PATAT, ICAART, MIC, GECCO. Reviewer for International Journals such as European Journal of Operational Research, Journal of Scheduling, Annals of Operations Research Former Editorial Member of Algorithms, an MDPI journal (2015-2020). External reviewer for research projects (Reprise, CHIST-ERA)
Organization of Scientific Events	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. 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.
Affiliations and Memberships	Member of the Danish Operations Research Society and three times part of the committee that awards the best Danish Master thesis in OR.

Other Competences

Languages	Italian (mother language), English (proficient user), Danish (Independent user), German (basic user), French (basic user)
Programming Skills	Programming languages (C, C++, Python) Markup languages (HTML, CSS) Scripting languages (bash) Statistical and mathematical software (R) IP and CP modeling (ZIMPL/AMPL, Gurobi, Gecode, MiniZinc) Revision control (Subversion, Git) Digital Typesetting (LaTeX)

Asc. Prof. Stefano Gualandi, University of Pavia (Italy)
Prof. Andrea Schaerf, University of Udine (Italy)
Asc. Prof. Carols Fonseca and Asc. Prof. Luis Paquete, University of Coimbra, (Portugal)
Asc. Prof. Fabio Vandin, University of Padua, (Italy)
Dr. Thomas Stützle, Université Libre de Bruxelles (Belgium)

- Profile at Google Scholar: h-index: 21 (14 since 2018). https://scholar.google.com/citations?user=RUfo3KoAAAAJ.
- Profile at ORCID: https://orcid.org/0000-0002-6136-8496
- Profile at DBLP: https://dblp.org/pid/21/23

International Journals:

IJ.11 M. Chiarandini, R. Fagerberg, S. Gualandi (2019). Handling preferences in student-project allocation. *Annals OR*, vol. 275, no. 1, pp. 39–78.

IJ.10 D. Koster, T. Cadierno, M. Chiarandini (2019). Mental simulation of object orientation and size: A conceptual replication with second language learners. *Journal of the European Second Language Association*, vol. 2, no. 1, pp. 38–48.

IJ.9 M. Chiarandini, N. H. Kjeldsen, N. Nepomuceno (2014). Integrated planning of biomass inventory and energy production. *IEEE Transactions on Computers*, vol. 63, no. 1, pp. 102–114.

IJ.8 M. Chiarandini, L. Di Gaspero, S. Gualandi, A. Schaerf (2012). The balanced academic curriculum problem revisited. *Journal of Heuristics*, vol. 18, no. 1, pp. 119–148.

IJ.7 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.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 IxJ 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.

Conference Proceedings:

CP.26 E. Andersen, M. Chiarandini, M. Hassani, S. Jänicke, P. Tampakis, A. Zimek (2022). Evaluation of probability distribution distance metrics in traffic flow outlier detection. In *23rd IEEE International Conference on Mobile Data Management, MDM 2022, Paphos, Cyprus, June 6-9, 2022*, pp. 64–69, IEEE.

CP.25 N. S. Andersen, M. Chiarandini (2022). Together about dementia. In L. D. Raedt (Ed.), *Proceedings of the Thirty-First International Joint Conference on Artificial Intelligence, IJCAI 2022, Vienna, Austria, 23-29 July 2022*, pp. 5888–5891, ijcai.org.

CP.24 C. McCarthy, P. Tampakis, M. Chiarandini, M. B. Randers, S. Jänicke, A. Zimek (2022). Analyzing passing sequences for the prediction of goal-scoring opportunities. In U. Brefeld, J. Davis, J. V. Haaren, A. Zimmermann (Eds.), *Machine Learning and Data Mining for Sports Analytics - 9th International Workshop, MLSA 2022, Grenoble, France, September 19, 2022, Revised Selected Papers*, vol. 1783 of *Communications in Computer and Information Science*, pp. 27–40, Springer.

CP.23 N. S. Andersen, M. Chiarandini, J. Mauro (2021). Wandering and getting lost: the architecture of an app activating local communities on dementia issues. In *SEH 2021: 3rd ICSE Workshop on Software Engineering for Healthcare*, IEEE Digital Library, Virtual.

CP.22 Z. Sun, M. Chiarandini (2021). An exact algorithm for group formation to promote collaborative learning. In M. Warschauer, G. Lynch (Eds.), *LAK21: 11th International Learning Analytics and Knowledge Conference (LAK21), April 12–16, 2021, Irvine, CA, USA*, Association for Computing Machinery, New York, NY, USA.

CP.21 Y. Djenouri, A. Zimek, M. Chiarandini (2018). Outlier detection in urban traffic flow distributions. In *IEEE International Conference on Data Mining, ICDM 2018, Singapore, November 17-20, 2018*, pp. 935–940, IEEE Computer Society.

CP.20 A. N. Knudsen, M. Chiarandini, K. S. Larsen (2018). Heuristic variants of A* search for 3D flight planning. In W. J. van Hoeve (Ed.), *Integration of Constraint Programming, Artificial Intelligence, and Operations Research - 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings*, vol. 10848 of *Lecture Notes in Computer Science*, pp. 361–376, Springer.

CP.19 C. K. Jensen, M. Chiarandini, K. S. Larsen (2017). Flight Planning in Free Route Airspaces. In G. D'Angelo, T. Dollevoet (Eds.), *17th Workshop on Algorithmic Approaches for Transportation Modelling, Optimization, and Systems (ATMOS 2017)*, vol. 59 of *OpenAccess Series in Informatics (OASIcs)*, pp. 1–14, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, Dagstuhl, Germany.

CP.18 A. N. Knudsen, M. Chiarandini, K. S. Larsen (2017). Constraint handling in flight planning. In J. C. Beck (Ed.), *Principles and Practice of Constraint Programming - 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 - September 1, 2017, Proceedings*, vol. 10416 of *Lecture Notes in Computer Science*, pp. 354–369, Springer.

CP.17 A. Bomersbach, M. Chiarandini, F. Vandin (2016). An efficient branch and cut algorithm to find frequently mutated subnetworks in cancer. In M. C. Frith, C. N. S. Pedersen (Eds.), *Algorithms in Bioinformatics - 16th International Workshop, WABI 2016, Aarhus, Denmark, August 22-24, 2016. Proceedings*, vol. 9838 of *Lecture Notes in Computer Science*, pp. 27–39, Springer. Supplementary material at https://imada.sdu.dk/Research/MaCCS-BC/.

CP.16 A. N. Knudsen, M. Chiarandini, K. S. Larsen (2016). Vertical optimization of resource dependent flight paths. In G. A. Kaminka, M. Fox, P. Bouquet, E. Hüllermeier, V. Dignum, F. Dignum, F. van Harmelen (Eds.), *ECAI 2016 - 22nd European Conference on Artificial Intelligence, 29 August-2 September 2016, The Hague, The Netherlands - Including Prestigious Applications of Artificial Intelligence (PAIS 2016)*, vol. 285 of *Frontiers in Artificial Intelligence and Applications*, pp. 639–645, IOS Press.

CP.15 M. Chiarandini, R. Fagerberg, S. Gualandi (2012). Towards fair and efficient assignments of students to projects. In *Proceedings of the 9th International Conference on the Practice and Theory of Automated Timetabling (PATAT2012)*, pp. 388–390. Extended abstract.

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. Source code available at http://www.imada.sdu.dk/~marco/gcp/rlf.

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, Universitè 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.

CP.3 L. Bianchi, M. Birattari, M. Chiarandini, M. Manfrin, M. Mastrolilli, L. Paquete, O. Rossi-Doria, T. Schiavinotto (2004). Metaheuristics for the vehicle routing problem with stochastic demand. In Y. X. et al. (Ed.), *Parallel Problem Solving from Nature - PPSN VIII*, vol. 3242 of *Lecture Notes in Computer Science*, pp. 450–460, Springer, Berlin, Germany.

CP.2 M. Chiarandini, T. Stützle (2002). An application of iterated local search to graph coloring. In D. S. Johnson, A. Mehrotra, M. Trick (Eds.), *Proceedings of the Computational Symposium on Graph Coloring and its Generalizations*, pp. 112–125, Ithaca, New York, USA.

CP.1 M. Chiarandini, A. Schaerf, F. Tiozzo (2000). Solving employee timetabling problems with flexible workload using tabu search. In E. Burke, W. Erben (Eds.), *Proceedings of the 3th International Conference on the Practice and Theory of Automated Timetabling, PATAT 2000*, pp. 298–302, Konstanz, Germany.

Book Chapters and Post-Conference Proceedings:

BC.7 M. Chiarandini, I. Dumitrescu, T. Stützle (2018). Stochastic local search algorithms for the graph colouring problem. In T. F. Gonzalez (Ed.), *Handbook of Approximation Algorithms and Metaheuristics, Second Edition, Volume 2: Contemporary and Emerging Applications*, Chapman and Hall/CRC.

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.

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