Personal information

Date of birth		E-mail	david.schindl@hesge.ch
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	Ch. de la Tambourine 17	Google scholar ID	David Schindl
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Education

2001-2004	Ph.D. in Mathematics, Swiss Federal Institute of Technology (EPFL), Some combinatorial	
	optimization problems in graphs with applications in telecommunications and tomography, su-	
	pervised by Prof Dominique de Werra	
2000-2001	Master in Mathematics, Swiss Federal Institute of Technology (EPFL)	
1996-2000	Studies in Mathematics, Swiss Federal Institute of Technology (EPFL)	

Employment history

2019-today	Senior researcher and Lecturer, Dpt of Informatics, U. of Fribourg (UniFR), Switzerland (40%)
2009-today	Lecturer, Haute Ecole de Gestion of Geneva (HEG), Switzerland (only 60% since 2019)
2008-2009	Research fellow and teacher at HEG
2005 - 2007	Postdoctoral Fellow, Group for Research in Decision Analysis (GERAD), Montreal, Canada

Teaching

Since 2022	Decision Support II (UniFR)
2019 - 2023	Graph Theory and Applications (UniFR)
2018 - 2022	Recherche opérationnelle (HEG)
Since 2008	Statistiques 1-4, Mathématiques 2-4, (HEG)
2004	Optimisation combinatoire (Lebanese University, Beirut, Lebanon)
2001-2004	Algorithmique, Graphes et réseaux (EPFL, teaching assistant)

Supervision and co-supervision

PhD theses	N. Baghirova (UniFR, Since 2020)
Master theses	L. Grandjean, T. Bornand-Jaccard , C. Chatelain (EPFL, 2001-2004) J. Moro, E. Bangerter, J. Zuber (UniFR, 2019-2022)
Bachelor theses	L. Simonin, F. Campos, G. Valero (HEG 2016, 2021, 2023) D. Berger, B. Schorderet, M. Corpataux, E. Vaz Pinto, M. Bonvin (UniFR, 2019-2023)

PhD jury memberships

2017 Ana María Nogareda, New swarm-based metaheuristics for resource allocation and scheduling problems, Departamento de Ingeniería Informática, Escuela Politécnica Superior, Universidad Autónoma de Madrid.

Approved research projects (main instigator)

2023	"Programme Gaspard-Monge pour l'Optimisation" grant covering travel expenses in an industrial
	project with Electricité de France (EDF)

- 2021 SBB Research Fund grant for a one year Senior Researcher position
- 2004 SNF grant for a one year postdoctoral stay at GERAD

Other research projects and mandates

2019-2020	Staff scheduling for a pharmaceutical company
2018-2019	Course timetabling at Haute Ecole de Santé de Genève (POC)
2017 - 2018	Jop-Shop scheduling for a company in the metallurgic industry
2017	Staff scheduling for a library
2016	Staff scheduling for a team of journalists

Institutional responsibilities

Since 2010	In charge of courses and exams timetabling for HEG, as well as student assignment to optional
	courses. Since 2013 manager of a team (currently 4 persons) for that purpose.
Since 2022	In charge of accounts auditing for the Swiss Operations Research Society

Memberships in boards, scientific societies and individual scientific reviewing activities

2023	Guest editor for the "Graphs and Optimization XI" (GO XI) Special Issue in Discrete Applied
	Mathematics (DAM)
2015 - 2016	Guest editor for the "Graphs and Optimization IX" (GO IX) Special Issue in Discrete Applied
	Mathematics (DAM)
2001-today	Reviewing activities for various journals: Discrete Applied Mathematics, Mathematical Pro-
	gramming Computation, Journal of Heuristics, EURO Journal on Computational, Optimiza-
	tion, Computers and Operations Research, Algorithmica
2001-today	Member of the Swiss Operations Research Society

Organization of conferences, workshops

Conferences 49th International Workshop on Graph-Theoretic Concepts in Computer Science 2023 Graphs and Optimisation VII (GO VII) 2010, GO IX 2014, GO X 2016, GO XI 2023 European Chapter on Combinatorial Optimization XXXI (ECCO XXXI) 2018

Prizes, awards and fellowships

2001	Ranked 5th out of 27 teams in the French Operations Research Society Challenge for the best	
	optimization program on an industrial application	
2000-2001	1 Swiss Operations Research Society Best Master Thesis Award in Operations Research in	
	Switzerland	
1995	Ranked 8th (out of approx. 1000 participants) at the Championnat de Jeux Mathématiques et	
	Logiques	

Languages

French	Native
English	Fluent
German	Advanced

LIST OF PUBLICATIONS

Refereed international journals

- 1. D. Schindl. Optimal student sectioning on mandatory courses with various sections numbers. Annals of Operations Research, 275(1):209–221, 2019
- 2. D. Schindl and N. Zufferey. A learning tabu search for a truck allocation problem with linear and nonlinear cost components. *Naval Research Logistics (NRL)*, 62(1):32–45, 2015
- 3. A. Hertz, O. Marcotte, and D. Schindl. On the maximum orders of an induced forest, an induced tree, and a stable set. *Yugoslav Journal of Operations Research*, 24(2):199–215, 2014
- 4. D. Schindl and N. Zufferey. Solution methods for fuel supply of trains. *INFOR: Information Systems and Operational Research*, 51(1):23–30, 2013
- 5. N. Zufferey, O. Labarthe, and D. Schindl. Heuristics for a project management problem with incompatibility and assignment costs. *Computational Optimization and Applications*, 51(3):1231–1252, 2012
- 6. M. Plumettaz, D. Schindl, and N. Zufferey. Ant local search and its efficient adaptation to graph colouring. Journal of the Operational Research Society, 61(5):819–826, 2010
- P. Hansen, A. Hertz, R. Kilani, O. Marcotte, and D. Schindl. Average distance and maximum induced forest. Journal of Graph Theory, 60(1):31–54, 2009
- 8. P. Hansen, M. Labbé, and D. Schindl. Set covering and packing formulations of graph coloring: Algorithms and first polyhedral results. *Discrete Optimization*, 6(2):135 147, 2009
- 9. A. Hertz, D. Schindl, and N. Zufferey. A solution method for a car fleet management problem with maintenance constraints. *Journal of Heuristics*, 15(5):425–450, 2009
- T. Bornand-Jaccard, D. Schindl, and D. de Werra. Some simple optimization techniques for self-organized public key management in mobile ad hoc networks. *Discrete Applied Mathematics*, 154(8):1223 – 1235, 2006
- 11. M. Costa, D. de Werra, C. Picouleau, and D. Schindl. A solvable case of image reconstruction in discrete tomography. *Discrete Applied Mathematics*, 148(3):240 245, 2005
- 12. D. Schindl. Some new hereditary classes where graph coloring remains NP-hard. *Discrete Mathematics*, 295(1-3):197–202, 2005
- 13. A. Hertz, D. Schindl, and N. Zufferey. Lower bounding and tabu search procedures for the frequency assignment problem with polarization constraints. 4OR, 3(2):139–161, 2005
- 14. A. Hertz, V. Lozin, and D. Schindl. Finding augmenting chains in extensions of claw-free graphs. *Information Processing Letters*, 86(6):311 316, 2003
- 15. M. U. Gerber, A. Hertz, and D. Schindl. P5-free augmenting graphs and the maximum stable set problem. *Discrete Applied Mathematics*, 132(1-3):109–119, 2003. Stability in Graphs and Related Topics

Refereed proceedings

- 1. N. Baghirova, C. L. Gonzalez, B. Ries, and D. Schindl. Locally Checkable Problems Parameterized by Clique-Width. In 33rd International Symposium on Algorithms and Computation (ISAAC 2022), volume 248 of Leibniz International Proceedings in Informatics (LIPIcs), pages 31:1–31:20, 2022
- S. Varone, D. Schindl, and C. Beffa. Flexible job shop scheduling problem with sequence-dependent transportation constraints and setup times. In Annals of Computer Science and Information Systems, volume 26, pages 97–102, 2021
- 3. Z. Deniz, S. Nivelle, B. Ries, and D. Schindl. On some subclasses of split B1-EPG graphs. In Y. Kohayakawa and F. K. Miyazawa, editors, *LATIN 2020: Theoretical Informatics*, pages 625–636, Cham, 2020. Springer International Publishing
- 4. Z. Deniz, S. Nivelle, B. Ries, and D. Schindl. On split B1-EPG graphs. In M. A. Bender, M. Farach-Colton, and M. A. Mosteiro, editors, *LATIN 2018: Theoretical Informatics*, pages 361–375, Cham, 2018. Springer International Publishing
- D. Schindl. Student sectioning for minimizing potential conflicts in multi-section courses. In Practice and Theory on Automated Timetabling 2016 (PATAT 2016), 2016
- 6. N. Zufferey and D. Schindl. Learning tabu search for combinatorial optimization. In E. Pinson, F. Valente, and B. Vitoriano, editors, *Proceedings of the third International Conference Operations Research and Enterprise Systems (ICORES 2014)*, Proceedings of the third International Conference Operations Research and Enterprise Systems ICORES 2014, pages 3–11, Piscataway, 2015. Springer. ID: unige:73313

- S. Varone and D. Schindl. Course opening, assignment and timetabling with student preferences. In Proceedings of the 2nd International Conference on Operations Research and Enterprise Systems (ICORES 2013), pages 153–158, 2013
- 8. D. Schindl and N. Zufferey. Ant local search for fuel supply of trains in america. In *Proceedings of the 1st IEEE International Conference on Logistics Operations Management (LOM 2012)*, Proceedings of the 1st IEEE International Conference on Logistics Operations Management, 2012. ID: unige:26481
- 9. D. Schindl and N. Zufferey. A local search for refueling locomotives. In Proceedings of the 54th annual conference of the Administrative Science Association of Canada, Production & Operations Management Division (ASAC 2011), 2011
- 10. N. Zufferey, O. Labarthe, and D. Schindl. Tabu search for a project scheduling problem with incompatibility and assignment costs. In *Proceedings of the 12th International Workshop on Project Management* and Scheduling (PMS 2010), 2010