**5. CURRICULUM VITAE, PUBLICATIONS AND OTHER PUBLISHED WORKS**

**PART 1**

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| **1a. Personal details** | | | | | | | | | |
| **Full name** | *Title*  Dr. | | *First name*  Günther | | *Second name(s)*  Robert | | | *Family name*  Raidl | |
| **Present position** | | | | ao. Univ.-Professor | | | | | |
| **Organisation/Employer** | | | | Technische Universität Wien (TU Wien) | | | | | |
| **Contact Address** | | Institute of Logic and Computation | | | | | | | |
| Favoritenstr. 9/E19201 | | | | | | | |
| Vienna, Austria | | | | | **Post code** | | 1040 |
| **Work telephone** | | +43-1-58801-19116 | | | | **Mobile** | +43-664-605882186 | | |
| **Email** | | raidl@ac.tuwien.ac.at | | | | | | | |
| **Personal website** | | https://www.ac.tuwien.ac.at/raidl | | | | | | | |

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| **1b. Academic qualifications** |

2003, Habilitation in Practical Computer Science, TU Wien, Austria

1994, PhD, Computer Science, TU Wien, Austria

1992, Dipl.-Ing. (MSc), Computer Science, TU Wien, Austria

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| **1c. Professional positions held** |

2009-present, ao. Univ.-Professor, TU Wien, Austria

2005-2009, Temporal full professorship for combinatorial optimization, TU Wien, Austria

2003-2005, Associate Professor, TU Wien, Austria

2001-2003, Assistant Professor, TU Wien, Austria

1992-2001, Research Assistant and Lecturer, TU Wien, Austria

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| **1d. Present research/professional speciality** |

* Algorithms, combinatorial optimization, operations research, machine learning
* Metaheuristics, evolutionary computation, mathematical/constraint programming

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| **1e. Total years research experience** | 31 years |

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| **1f. Professional distinctions and memberships (including honours, prizes, scholarships, boards or governance roles, etc)** |

**Research funding of last 10 years**

* 2023-2027, PI of the project “Learning to Solve Dynamic Vehicle Routing Problems”, funded by Honda Research Institute Europe, Germany
* 2022-2025, PI of the project “Cooperative Personnel Scheduling”, funded by Honda Research Institute Europe, Germany
* 2018-2024, PI of the project “Cooperative Optimization Approaches for Distributing Service Points”, funded by Honda Research Institute Europe, Germany
* 2016-2024, Faculty member of the Vienna Graduate School on Computation Optimization (VGSCO), doctoral college funded by the, grant no. W1260
* 2015-2019, Co-PI of the project “Cycles in Graphs and Properties of Graphs with Special Cycle Structures”, funded by the FWF, grant no. 27615-N25
* 2015-2017, Co-PI and local leader of the project “Location Planning of Bike Sharing Systems”, funded by FFG, grant no. 849028
* 2012-2015, PI of project “Complete Solution Archives for Evolutionary Combinatorial Optimization”, funded by the FWF, grant no. P24660-N23
* 2011-2014, Co-PI of the project “Balancing Bicycle Sharing Systems”, funded by the FFG, grant no. 831740
* 2010-2014, Co-PI of the project “Optimization Challenges in the Operation of the Future, Federated Internet (OptFI)” funded by WWTF, grant no. ICT10-027

**Awards**

* EvoStar “Old Croc” Award for Outstanding Contributions to Evolutionary Computation in Europe, 2012
* Best paper awards: Evolutionary Computation in Combinatorial Optimization Conferences (EvoCOP) in 2008, 2010, 2013, 2022, and 2023
* Best paper award at 9th Int.\ Conference on Hybrid Intelligent Systems (HIS 2009)
* Best paper award at Workshop on Analysis and Design of Representations, Genetic and Evolutionary Computation Conference's Workshops Proceedings, 2003

**Current Editorships**

* Associate editor for ACM Transactions on Evolutionary Learning and Optimization​, since 2019
* Associate editor of the INFORMS Journal on Computing, since 2013
* Associate editor of the Evolutionary Computation Journal, MIT Press, 2005-2014, editorial board member since 2015
* Editorial board member of the Algorithms journal , MDPI, since 2020
* Editorial board member of the journal Engineering Applications of Artificial Intelligence, Elsevier, since 2022
* Editorial board member of the Metaheuristics journal, Springer, since 2018

**Major Organizational Activities and Memberships**

* Co-founder and member of the steering committee of the Conference Series on Evolutionary Computation in Combinatorial Optimization, EvoCOP, since 2001
* Steering committee member of EvoAPPS, the Int. Conference Series on Applications of Evolutionary Computation, since 2018
* Steering committee member of the Workshop on Hybrid Metaheuristics, since 2012
* TU Wien's coordinator in the European Marie Curie Research Training Network on Algorithmic and Discrete Optimization (ADONET), 2005-2007
* Exec. Board member of the Austrian Society of Operations Research, 2013-2016.

**Major Conference Organization Activities**

* Co-Chair of the Workshop on Theory and Applications of Metaheuristic Algorithms at the International Conference on Computer Aided Systems Theory, 2024, 2022, 2019, 2017, 2015, 2013, and 2011
* Local chair of SoCS 2022: The Int. Symposium on Combinatorial Search, 2022
* Program Chair of the 10th Metaheuristic International Conference (MIC), 2013
* Local Co-Organizer of EvoStar 2013
* General and Local Chair of the Hybrid Metaheuristics Workshop, 2010
* Co-Chair of the Evolutionary & Metaheuristic Combinatorial Optimization Track of the 2011 Genetic and Evolutionary Computation Conference (GECCO), 2011
* Editor-in-Chief and Program Chair of GECCO 2009, the 11th Annual Genetic and Evolutionary Computation Conference 2009, ACM, Montreal, Canada, 2009
* IEEE Computational Intelligence Society Emergent Technology Technical Committee Member (IEEE CIS ETTC), 2012

**Other Honours**

* Supervision of over 25 PhD students, 18 so far successfully completed
* Over 42 invited talks given worldwide
* Reviewer for over 40 int. journals in the area of optimization and metaheuristics
* Program committee member for over 80 international conferences

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| **1g. Total number of *peer reviewed* publications and patents** | Journal articles | Books | Book chapters, books edited | Conference proceedings | Patents |
| 55 | 1 | 15 | 201 | 0 |

**PART 2**

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| **2a. Research publications and dissemination** |

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| Peer-reviewed journal articles |
| * S. Limmer, J. Varga, **G. R. Raidl**: Large Neighborhood Search for Electric Vehicle Fleet Scheduling, Energies 16(12), art.nr. 4576, **2023** * J. Varga, **G. R. Raidl**, S. Limmer: Computational Methods for Scheduling the Charging and Assignment of an On-Site Shared Electric Vehicle Fleet, Access 10, art.nr. 105786, **2022** * M. Djukanovi´c, A. Kartelj, D. Matic, M. Grbic, C. Blum, **G. R. Raidl**: Graph Search and Variable Neighborhood Search for Finding Constrained Longest Common Subsequences in Artificial and Real Gene Sequences, Applied Soft Computing 122, art.nr. 108844, **2022**, * T. Jatschka, **G. R. Raidl**, T. Rodemann: A General Cooperative Optimization Approach for Distributing Service Points in Mobility Applications, Algorithms 14(8), art.nr. 232, **2021** * B. Nikolic, A. Kartelj, M. Djukanovic M. Grbic, C. Blum, **G. R. Raidl**: Solving the Longest Common Subsequence Problem Concerning Non-Uniform Distributions of Letters in Input Strings, Mathematics 9(13), art.nr. 1515, **2021** * C. Blum, M. Djukanovic, A. Santini, H. Jiang, C.-M. Li, F. Manya, **G. R. Raidl**: Solving Longest Common Subsequence Problems via a Transformation to the Maximum Clique Problem, Computers & Operations Research 125(105089), **2021** * M. Horn, J. Maschler, **G. R. Raidl**, E. Rönnberg: A\*-based Construction of Decision Diagrams for a Prize-Collecting Scheduling Problem, Computers & Operations Research 126(105125), **2021** * M. Horn, **G. R. Raidl**, E. Rönnberg: A\* Search for Prize-Collecting Job Sequencing with One Common and Multiple Secondary Resources, Annals of Operations Research 302, pp. 477-501, **2021** * B. Klocker, H. Fleischner, **G. R. Raidl**: A Model for Finding Transition-Minors, Discrete Applied Mathematics 228, pp. 242–264, **2020** * M. Horn, **G. R. Raidl**, C. Blum: Job Sequencing with One Common and Multiple Secondary Resources: An A∗/Beam Search Based Anytime Algorithm, Artificial Intelligence 227(103173), **2019** * M. Riedler, **G. R. Raidl**: Solving a Selective Dial-a-Ride Problem with Logic-based Benders Decomposition, Computers & Operations Research 96, pp. 30–54, **2018** * B. Biesinger, B. Hu, **G. R. Raidl**: A Genetic Algorithm in Combination with a Solution Archive for Solving the Generalized Vehicle Routing Problem with Stochastic Demands, Transportation Science 52(3), pp. 673–690, 2018 * P. C. Pop, C. Sabo, B. Biesinger, B. Hu, **G. R. Raidl**: Solving the Two-State Fixed-Charge Transportation Problem with a Hybrid Genetic Algorithm, Carpathian Journal of Mathematics 33(3), pp. 365–371, 2017 * C. Kloim¨ullner, **G. R. Raidl**: Full-Load Route Planning for Balancing Bike Sharing Systems by Logic-Based Benders Decomposition, Networks 69(3), pp. 270–289, 2017 * E. Lizarraga, M. J. Blesa, C. Blum, **G. Raidl**: Large Neighborhood Search for the Most Strings with Few Bad Columns Problem, Soft Computing 21(17), pp. 4901–4915, 2017 * B. Biesinger, B. Hu, **G. R. Raidl**:A Hybrid Genetic Algorithm with Solution Archive for the Discrete (r|p)-Centroid Problem, Journal of Heuristics 21(3), pp. 391–431, 2015 * G. Raidl: Decomposition Based Hybrid Metaheuristics, European Journal of Operational Research 244(1), pp. 66-76, 2015 * M. Leitner, **G. R. Raidl**: Branch-and-Cut-and-Price for Capacitated Connected Facility Location, Journal of Mathematical Modelling and Algorithms, 10(3), pp. 245–267, 2011 |
| Peer reviewed books |
| * C. Blum, **G. R. Raidl**: Hybrid Metaheuristics – Powerful Tools for Optimization, in series Artificial Intelligence: Foundations, Theory, and Algorithms, Springer, 2016. |
| Peer reviewed books, book chapters, books edited |
| * B. Biesinger, B. Hu, **G. R. Raidl**: A Memetic Algorithm for Competitive Facility Location Problems, in Business and Consumer Analytics: New Ideas, Springer, pp. 637–660, **2019** * **G. R. Raidl**, J. Puchinger, C. Blum: Metaheuristic Hybrids, in M. Gendreau and J. Y. Potvin: Handbook of Metaheuristics, pp. 385–417, Springer, **2019** * **G. R. Raidl**, J. Puchinger, and C. Blum: Metaheuristic Hybrids, in M. Gendreau and J. Y. Potvin: Handbook of Metaheuristics, 2nd edition, Int. Series in Operations Research & Management Science, volume 146, Springer, pp. 469–496, 2010 * M. Leitner, **G. R. Raidl**: Combining Lagrangian Decomposition with Very Large Scale Neighborhood Search for Capacitated Connected Facility Location, Post-Conference Book of the Eight Metaheuristics International Conference – MIC 2009 * C. Blum, J. Puchinger, **G. R. Raidl**, A. Roli: Hybrid Metaheuristics, CPAIOR 10th Anniversary, Springer, 2009 * J. Puchinger, **G. R. Raidl**, S. Pirkwieser: MetaBoosting: Enhancing Integer Programming Techniques by Metaheuristics, Matheuristics – Hybridizing Metaheuristics and Mathematical Programming, Annals of Information Systems, Vol. 10, Springer, pp. 71–102, 2009 |
| Refereed conference proceedings |
| * N. Frohner, **G. R. Raidl**, Francisco Chicano: Multi-Objective Policy Evolution for a Same-Day Delivery Problem with Soft Deadlines, in Proceedings of the Companion Conference on Genetic and Evolutionary Computation (GECCO 2023), ACM Press, pp. 1941-1949, **2023** * J. Varga, E. Karlsson, **G. R. Raidl**, E. Rönnberg, F. Lindsten, T. Rodemann: Speeding up Logic-Based Benders Decomposition by Strengthening Cuts with Graph Neural Networks, in Proceedings of the 9th International Conference on Machine Learning, Optimization, and Data Science (LOD 2023), to appear **2024** in Springer LNCS * J. Varga, **G. R. Raidl**, E. R¨onnberg, T. Rodemann: Interactive Job Scheduling with Partially Known Personnel Availabilities, in Proceedings of OLA 2023: Optimization and Learning, Springer CCIS 1824, pp. 236–247, **2023** * S. Limmer, J. Varga, **G. R. Raidl**: An Evolutionary Approach for Scheduling a Fleet of Shared Electric Vehicles, in EvoApplications 2023: Applications of Evolutionary Computation, Springer LNCS 13989, pp. 3–18, **2023** * M. Huber, **G. R. Raidl**: A Relative Value Function Based Learning Beam Search for the Longest Common Subsequence Problem, in Proceedings of the 18th International Conference on Computer Aided Systems Theory (EUROCAST 2022), Springer LNCS 13789, pp. 87–95, **2023** * N. Frohner, **G. R. Raidl**: Learning Value Functions for Same-Day Delivery Problems in the Tardiness Regime, in Extended Abstracts of the 18th International Conference on Computer Aided Systems Therory (EUROCAST 2022), Las Palmas, Spain, pp. 20-21, **2023** * R. Ettrich, M. Huber, **G. R. Raidl**: A Policy-Based Learning Beam Search for Combinatorial Optimization, in Proceedings of EvoCOP 2023 – Evolutionary Computation in Combinatorial Optimization, **best paper award winner**, Springer LNCS 13987, pp. 130–145, **2023** * N. Frohner, J. Gmys, N. Melab, **G. R. Raidl**, E.-G. Talbi: Parallel Beam Search for Combinatorial Optimization, in Workshops of the International Conference on Parallel Processing (ICPP 2022), art.-nr. 21, pp. 1–8, **2022** * J. Mayerhofer, M. Kirchweger, M. Huber, **G. R. Raidl**: A Beam Search for the Shortest Common Supersequence Problem Guided by an Approximate Expected Length Calculation, in Proceedings of EvoCOP 2022 – Evolutionary Computation in Combinatorial Optimization, **best paper award winner**, Springer LNCS 13222, pp. 127–142, **2022** * M. Huber, **G. R. Raidl**: Learning Beam Search: Utilizing Machine Learning to Guide Beam Search for Solving Combinatorial Optimization Problems, in Machine Learning, Optimization, and Data Science – 7th International Conference, LOD 2021, Springer LNCS 13164, pp. 283–298, **2022** * M. Horn, **G. R. Raidl**: A\*-Based Compilation of Relaxed Decision Diagrams for the Longest Common Subsequence Problem, in Proceedings of 17th Int. Conf. on Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR’21), Springer LNCS 12735, pp. 72–88, **2021** * A. Bracher, N. Frohner, **G. R. Raidl**: Learning Surrogate Functions for the Short-Horizon Planning in Same-Day Delivery Problems, in Proc. of 17th Int. Conf. on Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR’21), Springer LNCS 12735, pp. 283–298, **2021** |