

Mayron César de Oliveira Moreira | Curriculum Vitae

Departamento de Ciência da Computação, Universidade Federal de Lavras
Av. Central UFLA - Centro, Lavras - Minas Gerais - Brazil – 37200-900

☎ +55 35 99250 8414 • 📞 +55 35 3829 1933
✉ mayron.moreira@ufla.br • 🌐 <http://professores.dcc.ufla.br/~mayron/>

PhD in Computer Science and Computational Mathematics (University of São Paulo, Brazil), I am professor at Federal University of Lavras (UFLA) in Computer Science Department. My main interests are theory and applications of Operations Research.

Education

Academic Qualifications.....

- **University of São Paulo** **São Carlos**
PhD, Computer Science and Computational Mathematics, Funded by FAPESP *2011–2015*
Advisor: Professor Alysson M. Costa
- **University of São Paulo** **São Carlos**
MSc., Computer Science and Computational Mathematics, Funded by CNPq and FAPESP *2009–2011*
Advisor: Professor Alysson M. Costa
- **Federal University of Viçosa** **Viçosa**
BSc., Computer Science, Funded by FUNARBE and CNPq *2005–2008*
Advisor: Professor José Elias Claudio Arroyo

Notable Projects as Coordinator.....

- **Algoritmos para a otimização de sistemas de gerenciamento de cadeias produtivas:** *Research project funded by FUNDECC; Period: 2021-now; Institutions: UFLA.*
- **Algorithms for the menu planning problem:** *Research project funded by UFLA; Period: 2018-now; Institutions: UFLA.*
- **Territorial management for agrarian reform projects and environmental planning - Exact and heuristic algorithms:** *Research project funded by CNPq; Period: 2017-2020; Institutions: UFLA, UFRGS, UFV and USP.*
- **Exact and heuristic algorithms for districting problems:** *Research project funded by FAPEMIG; Period: 2017-2020; Institutions: UFLA, UFRGS, UFV and USP.*

Professional Experience

- **Federal University of Lavras - UFLA** **Lavras**
Professor *April 2015–now*
Courses: Algorithms on Graphs, Mathematical Programming, Project and Analysis of Algorithms, Discrete Mathematics, Algorithms and Data Structure, Introduction to Algorithms, Graduate Seminars; Researcher at L-LOOP (Lavras Laboratory of Optimization); Vice-coordinator of Bachelor in Computer Science from 2015 to 2017.

- **UNIMORE** **Reggio Emilia (Italy)**
Visiting Professor 2019
 Visiting Professor Abroad funded by DISMI/UNIMORE; Julia, JuMP; Contact: Professor Manuel Iori.
- **CIRRELT** **Montréal**
Visiting researcher 2019
 Research Stage Abroad; Job rotation, assembly lines; Advisor: Professor Jean-François Cordeau.
- **CIRRELT** **Montréal**
Visiting PhD student 2013–2014
 Research Stage Abroad funded by FAPESP; Robust optimization, assembly lines; Advisor: Professor Jean-François Cordeau.
- **Polytechnic University of Valencia** **Valencia**
Visiting PhD student 2013
 Research Stage Abroad funded by CAPES; U-shaped assembly lines, Heuristics; Advisor: Professor Cristóbal Miralles.
- **Polytechnic University of Cataluña** **Barcelona**
Visiting PhD student 2013
 Research Stage Abroad; Multi-objective optimization, Assembly lines; Advisor: Professor Rafael Pastor.
- **University of São Paulo** **São Carlos**
Teaching Assistant 2009–2012
 Introduction to Computer Programming, Mathematical Modeling, Mathematical Programming, Nonlinear Programming.
- **Federal University of Viçosa** **Viçosa**
Undergraduate student 2007–2008
 Research Stage funded by CNPq; Metaheuristics, Job shop scheduling; Advisor: Professor José Elias Claudio Arroyo.
- **Federal University of Viçosa** **Viçosa**
Undergraduate student 2007
 Technical Stage funded by FUNARBE; Terracing, Computational tool; Advisor: Professor Fernando Falco Pruski.

Relevant publications/monographies (last 5 years)

- Nicolás P Campana, Manuel Iori, Mayron César O Moreira. Mathematical models and heuristic methods for the assembly line balancing problem with hierarchical worker assignment. *International Journal of Production Research*, 1-19, 2021.
- Dilson L Pereira, Júlio C Alves, Mayron César O Moreira. A Multiperiod Workforce Scheduling and Routing Problem with Dependent Tasks. *Computers & Operations Research*, 118:104930, 2020.
- Alex Gliesch, Marcus Ritt, and Mayron César O Moreira. A multistart alternating tabu search for commercial districting. In *European Conference on Evolutionary Computation in Combinatorial Optimization*, pages 158–173. Springer, 2018.
- Mayron César O Moreira, Rafael Pastor, Alysson M Costa, and Cristóbal Miralles. The multi-objective assembly line worker integration and balancing problem of type-2. *Computers & Operations Research*, 82:114–125, 2017.
- Mayron César O Moreira, Jean-François Cordeau, Alysson M Costa, and Gilbert Laporte. Robust assembly line balancing with heterogeneous workers. *Computers & Industrial Engineering*, 88:254–263, 2015.

Technical and Personal skills

- **Programming languages:** C/C++, Java, Python, Julia.
- **Optimization tools:** Cplex, Gurobi, Google Operations Research tools; Mobile devices
- **Editing tools:** Latex, Microsoft Office, Open Office.
- **General Business Skills:** Good presentation skills, Works well in a team, Can write well organized and structured reports.

Language skills

- **Portuguese:** Mother tongue.
- **English:** Advanced.
- **Spanish:** Advanced.
- **French:** Advanced.
- **Italian:** Intermediate.
- **German:** Basic.

Prizes and Distinctions

- **18th European Conference on Evolutionary Computation in Combinatorial Optimisation** **Parma**
Top 3 Best Paper Candidates **2018**
A multistart alternating tabu search for commercial districting; Authors: Alex Glesch, Marcus Ritt, Mayron C.O. Moreira.
- **50th Brazilian Symposium of Operations Research** **Rio de Janeiro**
Best Undergraduate Research Paper **2018**
Model and heuristics for the assembly line balancing problem with hierarchical worker assignment; Student: Nicolas Porto Campana; Advisor: Professor Mayron César de Oliveira Moreira.
- **Regional Meeting of Applied and Computational Mathematics** **Lavras**
Best Scientific Poster **2018**
Heuristic algorithms for the assembly line balancing problem with hierarchical worker assignment; Student: Nicolas Porto Campana; Advisor: Professor Mayron César de Oliveira Moreira.
- **Scientific Initiation Symposium** **Viçosa**
Best Undergraduate Research Project **2007**
Metaheuristic Scatter Search for the Job Shop Scheduling Problem; Advisor: Professor José Elias Claudio Arroyo.

Talks

- **I Workshop em Data Science do DES/UFLA** **2019**
Federal University of Lavras, Lavras, Brazil
Pesquisa Operacional: conceitos básicos, aplicações e perspectivas.
- **I Semana da Matemática do DEX/UFLA** **2017**
Federal University of Lavras, Lavras, Brazil
Como empacotar objetos esféricos em um contêiner de um navio? Uma abordagem baseada no Método do Gradiente Espectral Projetado.

- **II Workshop de Matemática e Matemática Aplicada** 2017
Federal University of São João Del Rei, Ouro Branco, Brazil
Do campo à indústria: desenvolvimento de modelos matemáticos e algoritmos aplicados a problemas industriais e agrícolas.
- **Seminário de Otimização** 2014
University of São Paulo, São Carlos, Brazil
A robust approach for the assembly line balancing problem with heterogeneous workers.
- **Seminar of Chair de recherche du Canada en logistique et en transport** 2014
Université de Montréal, Montréal, Canada
A robust approach for the assembly line balancing problem with heterogeneous workers.
- **III Seminário Internacional Brasil, Espanha e Portugal (SIBEP).** 2013
Universidad de Santiago de Compostela, Lugo, Spain
Modelado de nuevos asentamientos en Brasil
- **III Seminário Internacional Brasil, Espanha e Portugal (SIBEP).** 2013
Universidad de Santiago de Compostela, Lugo, Spain
Modelado de nuevos asentamientos en Brasil
- **I Workshop em Probl. de Balanc. de Linhas de Produção e Designação de Trabalhadores.** 2009
University of São Paulo, São Carlos, Brazil
Um algoritmo de busca tabu minimalista mas eficiente para o problema de balanceamento de linhas de produção com trabalhadores deficientes

Participation in Conferences, Symposiums, and Workshops

- 50º Simpósio Brasileiro de Pesquisa Operacional, 2018. Rio de Janeiro, Brazil.
- I Semana da Matemática do DEX/UFLA, 2017. Lavras, Brazil.
- II Workshop de Matemática e Matemática Aplicada, 2017. Ouro Branco, Brazil.
- Journées de l'optimisation, 2014. Montréal, Canada.
- XXVI European Conference on Operational Research, 2013. Rome, Italy.
- III Seminário Internacional Brasil, Espanha e Portugal, 2013. Lugo, Spain.
- XVI CLAIO / XLIV SBPO, 2012. Rio de Janeiro.
- ALIO/INFORMS International Joint Meeting, 2010. Buenos Aires, Argentina.
- XXIV European Conference on Operational Research, 2010. Lisbon, Portugal.
- III Encontro Regional de Pesquisa Operacional da Região Sul, 2009. Porto Alegre, Brazil.
- I Workshop de Problemas de Balanceamento de Linhas de Produção com Trabalhadores Deficientes, 2009. São Carlos, Brazil.
- XII Oficina Nacional de Problemas de Corte, Empacotamento e Correlatos, 2009. São Carlos, Brazil.
- XIV Escuela Latinoamericana de Investigación de Operaciones, 2009. El Fuerte, Mexico.
- XLI Simpósio Brasileiro de Pesquisa Operacional, 2009. Porto Seguro, Brazil.
- XVII Congresso Brasileiro de Automática, 2008. Juiz de Fora, Brazil.

Other Professional Activities

- **Reviewer:** International Journal de Production Research, Computers and Industrial Engineering, Computers and Operations Research, Engineering Optimization, Applied Mathematical Modelling, Journal of Intelligent Manufacturing, TOP, Pesquisa Operacional para o Desenvolvimento, African Journal of Bussiness Management.

Hobbies and Personal Interests

- Watch Atletico Mineiro's soccer matchings, Body building, swimming, Play guitar, play bass, Dance forró, dance bolero, Read, Travel.

References

- References available on request.