

Mayron César de Oliveira Moreira | Curriculum Vitae

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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.....

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

Notable Projects as Coordinator.....

- **Territorial management for agrarian reform projects and environmental planning - Exact abd heuristic algorithms:** *Research project funded by CNPq; Period: 2017-now; Institutions: UFLA, UFRGS, UFV and USP.*
- **Exact and heuristic algorithms for districting problems:** *Research project funded by FAPEMIG; Period: 2017-now; Institutions: UFLA, UFRGS, UFV and USP.*

Professional Experience

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| ○ Federal University of Lavras - UFLA | Lavras |
| ○ <i>Professor</i> | 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. | |
| ○ CIRRELT | Montréal |
| ○ <i>Visiting PhD student</i> | 2013–2014 |
| Research Stage Abroad funded by FAPESP; Robust optimization, assembly lines; Advisor: Professor Jean-François Cordeau. | |

- Polytechnic University of Valencia** Valencia
2013
 - *Visiting PhD student*
Research Stage Abroad funded by CAPES; U-shaped assembly lines, Heuristics; Advisor: Professor Cristóbal Miralles.
- Polytechnic University of Cataluña** Barcelona
2013
 - *Visiting PhD student*
Research Stage Abroad; Multi-objective optimization, Assembly lines; Advisor: Professor Rafael Pastor.
- University of São Paulo** São Carlos
2009–2012
 - *Teaching Assistant*
Introduction to Computer Programming, Mathematical Modeling, Mathematical Programming, Nonlinear Programming.
- Federal University of Viçosa** Viçosa
2007–2008
 - *Undergraduate student*
Research Stage funded by CNPq; Metaheuristics, Job shop scheduling; Advisor: Professor José Elias Claudio Arroyo.
- Federal University of Viçosa** Viçosa
2007
 - *Undergraduate student*
Technical Stage funded by FUNARBE; Terracing, Computational tool; Advisor: Professor Fernando Falco Pruski.

Relevant publications/monographies (last 5 years)

- Alex Griesch, 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.
- Alex Griesch, Marcus Ritt, and Mayron César O Moreira. A genetic algorithm for fair land allocation. In Proceedings of the Genetic and Evolutionary Computation Conference, pages 793–800. ACM, 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.
- Mayron César O Moreira, Cristóbal Miralles, and Alysson M Costa. Model and heuristics for the assembly line worker integration and balancing problem. *Computers & Operations Research*, 54:64–73, 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:** Basic.
- **German:** Basic.

Prizes and Distinctions

- **18th European Conference on Evolutionary Computation in Combinatorial Optimisation** Parma 2018
 - *Top 3 Best Paper Candidates*

A multistart alternating tabu search for commercial districting; Authors: Alex Gliesch, Marcus Ritt, Mayron C.O. Moreira.
- **50th Brazilian Symposium of Operations Research** Rio de Janeiro 2018
 - *Best Undergraduate Research Paper*

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 2018
 - *Best Scientific Poster*

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 2007
 - *Best Undergraduate Research Project*

Metaheuristic Scatter Search for the Job Shop Scheduling Problem; Advisor: Professor José Elias Claudio Arroyo.

Talks

- **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.

- University of São Paulo, São Carlos, Brazil

2009

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 of 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 Business 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.