

# gustavobittencourt

operations research

## about

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## languages

portuguese (native)

english (fluent)

spanish (advanced)

french (je ne parlez pas  
très bien, mais j'adore)

## programming

C, C++, CUDA

Python

Matlab, Scilab

VBA, Excel

Concert, OPL (CPLEX)

Mosel (Xpress)

R

L<sup>A</sup>T<sub>E</sub>X

HTML, CSS

Javascript

SQL

## softwares

MS Office

CPLEX

Promodel

Arena

MySQL

PostgreSQL

Fusion 360

SolidWorks

## who i am

I am a 28 years old Brazilian Ph.D. student passionate for my family, movies and complex problems! Highly motivated and greedy for knowledge, I am always trying to learn something new and to spread the infinitesimal knowledge I have for those surrounding me.

## interests

operations research, metaheuristics, mixed integer programming, stochastic programming, nonlinear programming, supply chain management, machine learning, discrete event simulation, finance, entrepreneurship

## education

since 2014 **Ph.D. student in Operations Research** COPPE/Federal University of Rio de Janeiro  
*Stochastic Multicommodity Inventory Location Routing Problem*

2011–2013 **M.Sc. in Operations Research** COPPE/Federal University of Rio de Janeiro  
*Inventory Location Problem with Risk Pooling Effect: A Performance Analysis Between Different Formulations*

2006–2010 **Production Engineer** Federal University of Juiz de Fora  
*Modeling and Implementation of a Computational System to Solve a Vehicle Routing Problem (VRP) with the Scatter Search Metaheuristic*

## awards

2015 **IFORS Grant to ELAVIO 2015**  
*Winner of the only grant offered by IFORS to attend the XIX Latin-American Summer School on Operations Research (ELAVIO 2015) in Quito, Ecuador.*

## experience

since 2014 **LORDE-UFRJ / Petrobras (Rio de Janeiro)** Ph.D. Researcher  
◦ Probarcos: Project realized at Imbetiba Port aiming to improve port operational efficiency through berth scheduling and vessel routes optimization. A complex simulation model was built using Promodel and VBA/ActiveX.  
◦ Placar: Evaluation of Petrobras current offshore cargo transport model, analysis of multi purpose vessel politics and design of the future operating model to be adopted. [Ongoing]

2011 - 2012 **GPI - Integrated Production Group / UFRJ (Rio de Janeiro)** M.Sc. Researcher  
*Consulting conducted by GPI for Petrobras in the benchmarking line of the project Support and Development of High-Performance Transportation and Storage.*

2008 - 2009 **Esdeva Printing Industry (Juiz de Fora)** Engineering Intern  
*Internship in Process Control at Esdeva, acting on the variables of the printing process of Goss Sunday 2000, Goss Sunday 3000 and Heidelberg M130 rotating printers.*

- 2008 - 2008 **DM&P – Development of Products and Markets (Belo Horizonte)** Engineering Intern  
*Internship in Project Planning using the FEL Methodology (Front-End Loading), developed by IPA, and concepts of PMBOK through consulting services to Votorantim Metals Zinc - Juiz de Fora Unit.*
- 2007 - 2008 **Federal University of Juiz de Fora (Juiz de Fora)** Professional Training Fellow  
*Development of technology-based products and educational objects aiming to facilitate the learning of subjects related to production processes, in the Production Engineering course. These objects were presented as animations (2D and 3D) and websites.*

## publications

### Article in Peer-Reviewed Journal

Comparação solução manual-busca dispersa em um caso do problema de roteamento de veículos capacitados.

Gustavo Cunha De Bittencourt, Stanley Rodrigues, Paulo Oswaldo Boaventura Netto, Samuel Jurkiewicz

*Revista del Instituto Chileno de Investigación Operativa* 1 (2013) pp. 11–20. 2013

### Conference Proceedings

Inventory Location Problem with Risk Pooling Effect: A Performance Analysis Between Different Formulations

Gustavo Cunha De Bittencourt, Virgílio José Martins Ferreira Filho, Laura Bahiense

*Annals of XLVII Simpósio Brasileiro de Pesquisa Operacional (SBPO) (to be presented and published)*, 2015, Porto de Galinhas, Brasil

Variable Neighborhood Search com Path Relinking Aplicado ao Problema de Coloração de Vértices

Gustavo Cunha De Bittencourt, Miranda Albino Martins Muaualo, Laura Bahiense

*Annals of XVI CLAIO - Congresso Latino-Iberoamericano de Investigación Operativa / XLIV SBPO - Simpósio Brasileiro de Pesquisa Operacional*, 2012, Rio de Janeiro, Brasil

Problema de Roteamento de Veículos Capacitados (PRVC): Solução Manual x Busca Dispersa

Gustavo Cunha De Bittencourt, Stanley Rodrigues, Paulo Oswaldo Boaventura Netto, Samuel Jurkiewicz

*XVI CLAIO - Congresso Latino-Iberoamericano de Investigación Operativa / XLIV SBPO - Simpósio Brasileiro de Pesquisa Operacional*, 2012, Rio de Janeiro, Brasil

### Conference Hearings

Simulation of Offshore Supply Operations

Gustavo Cunha De Bittencourt, Edilson Fernandes de Arruda

*XVIII EWGT - Euro Working Group Transportation*, 2015, Delft, Netherlands

Inventory Location Problem with Risk Pooling Effect: A Performance Analysis Between Different Formulations

Gustavo Cunha De Bittencourt, Virgílio José Martins Ferreira Filho, Laura Bahiense

*XVIII EWGT - Euro Working Group Transportation*, 2015, Delft, Netherlands

Inventory Location Problem with Risk Pooling Effect

Gustavo Cunha De Bittencourt, Virgílio José Martins Ferreira Filho, Laura Bahiense

*XVII CLAIO - Congresso Latino-Iberoamericano de Investigación Operativa*, 2014, Monterrey, México