

Allan Vieira de Castro Quadros

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EDUCATION

University of Brasilia - UnB

1. **B.Sc. in Statistics** 2018
Recipient of the “Outstanding Student” Award
Senior thesis: “A new method for finding the number of clusters”

State University of Campinas - Unicamp

2. **M.Sc. in Economic Development** 2012
Thesis: “Governance structures in the coffee production chain: a case study of the Alta Mogiana’s growers”
1. **Licenciatura in Geography** 2008

INTERESTS

Computational Statistics; Optimization; Parametric, Semi and Non-parametric Inference; Clustering Problems; Stochastic Processes; Machine Learning; Astrostatistics

EMPLOYMENT

Consulting

Statistics and Data Science Consultant Jul. 2017 - present

National Fund for Educational Development - FNDE

Lead Data Scientist (special position) Apr. 2020 - present
Educational Financing Specialist May 2013 - present
Governance and Strategic Management Officer (special position) Jan. 2019 - May 2019

RCX Investments

Registered Investment Advisor Jul. 2011 - Jun. 2012
accredited by the Brazilian Investment Advisors Association - ANCORD

University Center of Jaguariuna - UniFAJ

Lecturer in Economics Jul. 2010 - Apr. 2013

Brazilian Army - Infantry Branch

First Lieutenant Aug. 2007 - Jun. 2009
Second Lieutenant Aug. 2004 - Aug. 2007
Officer Candidate Dec. 2003 - Aug. 2004
Officer Student Feb. 2003 - Dec. 2003

SCIENTIFIC PRODUCTION

SOFTWARE

3. **mRpostman**: IMAP Toolkit for R. 2019.
CRAN stable version: <https://cran.r-project.org/package=mRpostman>
Dev version: <https://github.com/allanvc/mRpostman>
Package’s official website: <https://allanvc.github.io/mRpostman>

2. **emstreeR**: An R Package for Fast Computing Euclidean Minimum Spanning Trees. 2018.
CRAN stable version: <https://cran.r-project.org/package=emstreeR>
Dev version: <https://github.com/allanvc/emstreeR>
1. **FisFa - Fiscaliza Fatura** (*Invoice conformity check*). A Software for Contract Management developed in R and Python. 2016.
Brazilian Patent: BR 51 2016 000212 3. *FisFa has accounted for over US\$ 50 million in savings for the Brazilian government and received two awards.*

PAPERS

Astrostatistics:

Pedro P B Beaklini, **Allan V C Quadros**, Marcio G B de Avellar, Maria L L Dantas, André L F Cançado. “**AGN dichotomy beyond radio loudness: a Gaussian Mixture Model analysis**”. *Monthly Notices of the Royal Astronomical Society*, Volume 497, Issue 2, September 2020, Pages 1463-1474, <https://doi.org/10.1093/mnras/staa2072>.

CONFERENCE PAPERS

Applied Statistics:

1. Monique A S C Barreto, Taynara T F Malheiros, **Allan V C Quadros**, Lucieny S M Serra. “**Analysis of the environmental sound pressure level in a neonatal intensive care unit**”
Portuguese title: Análise do nível de pressão sonora ambiental em uma unidade de terapia intensiva neonatal.
34th International Meeting on Audiology (ELA). Foz do Iguaçu-PR, Brazil. May, 2019.

Economics:

2. **Allan V C Quadros**, Felipe P Silva. “**An evolutionary approach on the role of technology in agriculture**”
Portuguese title: Uma abordagem evolucionista do papel da tecnologia na agricultura.
XIX Brazilian Congress on Economics. Bonito-MS, Brazil. September, 2011. *One of the 14 winner articles selected by the referees.*
1. **Allan V C Quadros**. “**Strategies on quasi-rent appropriation in the coffee production chain: the case of Alta Mogiana’s growers**”
Portuguese title: Estratégias de apropriação de quase-rendas na cadeia produtiva de cafés: o caso dos produtores de cafés especiais da Alta Mogiana.
49th Congress of the Brazilian Rural and Economic Sociology Society (SOBER). Belo Horizonte-MG, Brazil. July, 2011.

TALKS, PRESENTATIONS AND SEMINARS

3. Invited talk: “**Data Science in the Government: successful cases at the National Fund for Educational Development**”.
Portuguese title: Ciência de Dados no Governo: casos de sucesso no Fundo Nacional de Desenvolvimento da Educação
III Workshop on Information, Data and Technology (WIDaT 2019), Department of Information Science - UnB, Brasília-DF, Brazil. Nov. 2019.
Slide deck: https://allanvc.github.io/slide_WIDaT2019
2. Invited talk: “**Data analysis in the Public Sector**”

Portuguese title: Análise de dados no Setor Público.

National Fund for Educational Development (FNDE). Brasilia-DF, Brazil. July, 2019.

Slide deck: https://allanvc.github.io/talk_DS_FNDE

1. Poster: **“Identifying students’ typical academic paths at ICS/UnB”**

Portuguese title: Identificação de trajetórias típicas dos estudantes do ICS/UnB.

22th Congress on Undergraduate Research - UnB. Brasilia-DF, Brazil. September, 2017.

OTHER WRITING

2. **Allan V C Quadros. “Who is afraid of Math?”**

Portuguese title: Quem tem medo de Matemática?.

A book to help people overcome mathematical anxiety. *In preparation.*

1. **Allan V C Quadros. “Data Analysis with R using Tidyverse”**

Portuguese title: Análise de Dados em R utilizando Tidyverse.

An on-line text book that is used in some of my R courses. Available at: allanvc.github.io/book_ADR-T.

TEACHING

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| 11. Data Analysis with R - Fast Intermediate Level
Instructor, FNDE, 15 hours | Aug. 2019 |
| 10. Data Analysis with R - Fast Introductory Level
Instructor, FNDE, 15 hours | Jul. 2019 |
| 9. Data Analysis with R - Intermediate Level
Instructor, FNDE, 28 hours | Jul. 2018 |
| 8. Data Analysis with R - Introductory Level
Instructor, FNDE, 21 hours | Jan. 2018 |
| 7. Business Economics
Lecturer, MBA in Financial Management and Accounting, UniFAJ | Fall, 2012 |
| 6. International Trade
Lecturer, UniFAJ | Spring and Fall, 2012 |
| 5. Introduction to Economics
Lecturer, UniFAJ | Fall, 2012 |
| 4. Management and International Trade
Invited Lecturer, MBA, Mackenzie Presbyterian University | Spring, 2012 |
| 3. GL600: Market Studies and Marketing
Teaching Assistant, Unicamp | Spring, 2011 |
| 2. Macroeconomics
Lecturer, UniFAJ | 2010 - 2012 |
| 1. Microeconomics
Lecturer, UniFAJ | 2010 - 2012 |

SCHOLARSHIPS

2. Coordination for the Improvement of the Higher Level Personnel - CAPES Sep. 2009 - Feb. 2012
1. Innovation Agency of Unicamp - INOVA May - Sep. 2009

AWARDS AND RECOGNITION

6. **University of Brasilia's Honor and Merit Award Nominee** May 2020
Nominated by the Statistics Department faculty for the University of Brasilia's Honor and Merit Award, which is an honor "*conceded by the university to a former student that has reached national and/or international recognition for his services to society with regard to the academic knowledge received at the University of Brasilia*".
5. **Outstanding Student Award** Sep. 2018
Honor conceded by the Department of Statistics at UnB to the student with the highest GPA (4.9641/5.0) at the end of the undergraduate program.
4. **Standout Project in Contract Management** Sep. 2018
Awarded to my FisFa Software at the 4th ANGC Awards - Best Initiatives of the Year on Contract Management, National Association of Contract Managers (Associação Nacional dos Gestores de Contratos - ANGC), Brazil.
3. **1st Place - Strengthening Internal Controls in Public Administration** Dec. 2016
Awarded to my FisFa Software at CGU's 4th Good Practices Contest, Ministry of Transparency and Comptroller-General of the Union (Ministério da Transparência e Controladoria Geral da União - CGU), Brazil.
2. **1st Place (of 14) at Army Reserve Officers' Training Corps - Professional Internship** Jul. 2004
(*Estágio de Instrução e Preparação de Oficiais Temporários - EIPOT*)
Officer Candidate with the highest GPA in the State of Sao Paulo in the military professional internship, 2nd Military Region, Brazilian Army.
1. **2nd Place (of 25) at Army Reserve Officers' Training Corps - Basic Course** Dec. 2003
(*Núcleo de Preparação de Oficiais da Reserva - NPOR*)
Officer Student with the second-highest GPA. NPOR Campinas-SP, Brazilian Army.