# Allan Vieira de Castro Quadros

allanvc.github.io  $\diamond$  allanvcq@gmail.com

#### **EDUCATION**

| University of Brasilia - UnB B.Sc. in Statistics with Outstanding Student Award | 2018 |
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| State University of Campinas - Unicamp  |      |
| M.Sc. in Economic Development   | 2012 |
| Full Teaching degree (B.Ed.) in Geography                                       | 2008 |

# **INTERESTS**

Statistical Computing, Statistical Learning, Optimization, Stochastic Processes, Computational Finance, R Programming, Astrostatistics

#### **EMPLOYMENT**

| Consulting Statistics and Data Science Consultant  | Jul. 2017 - now                                |
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| National Fund for Educational Development - FNDE<br>Educational Financing Specialist                               | May 2013 - now                                 |
| RCX Investments Registered Investment Adviser accredited by the Brazilian Investment Advisers Association - ANCORD | Jul. 2011 - Jan. 2012                          |
| University Center of Jaguariúna - UniFAJ<br>Lecturer in Economics  | Jul. 2010 - Apr. 2013                          |
| Brazilian Army - Infantry Branch   | A . 2007 I 2000                                |
| First Lieutenant Second Lieutenant   | Aug. 2007 - Jun. 2009<br>Aug. 2004 - Aug. 2007 |
| Officer Candidate  | Dec. 2003 - Aug. 2004  Dec. 2003 - Aug. 2004   |
| Officer Student  | Feb. 2003 - Dec. 2003                          |

#### SCIENTIFIC PRODUCTION

# **SOFTWARE**

- 3. mRpostman: IMAP Tools for R in a Tidy Way. 2019. CRAN stable version: https://cran.r-project.org/package=mRpostman Dev version: https://github.com/allanvc/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 Fiscalization*). A Software for Contract Management developed in R and Python. 2016.

Brazilian Patent: BR 51 2016 000212 3. Two awards winner.

#### WORKING PAPERS

# Radio Loud and Radio Quiet dichotomy: a multivariate analysis.

Pedro Beaklini, **Allan Quadros**, Rafael Souza, Marcio Avellar, Maria Dantas, André Cançado. *In preparation*.

#### CONFERENCE PAPERS

#### In Economics:

2. An evolutionary approach on the role of technology in agriculture (Portuguese title: Uma abordagem evolucionista do papel da tecnologia na agricultura).

**Allan Quadros**, Felipe Silva. XIX Brazilian Congress on Economics. Bonito-MS, Brazil. September, 2011. One of the 14 winner articles selected by the referees.

1. Strategies on quasi-rent appropriation in the coffee productive 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).

**Allan Quadros**. 49th Congress of the Brazilian Rural and Economic Sociology Society (SOBER). Belo Horizonte-MG, Brazil. July, 2011.

#### In Applied Statistics:

1. 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).

M.A.S.C. Barreto, T. T. F. Malheiros, **Allan Quadros**, L. S. M. Serra. 34th International Meeting on Audiology (ELA). Foz do Iguaçu-PR, Brazil. May, 2019.

#### **PRESENTATIONS**

Identifying students' typical academic paths at ICS/UnB (Portuguese title: Identificação de Trajetórias Típicas dos Estudantes do ICS/UnB).

Allan Quadros. 22th Congress on Undergraduate Research - UnB. September, 2017 (poster).

#### RESEARCH GROUPS AND PROJECTS

3. mlpackR 2018 - now

Description: Development of an R package aiming to provide, via RcppMLPACK, all the algorithms available in mlpack (v1.0) - the C++ Machine Learning Library, so R users do not have to deal with the R-Rcpp-C++ integration.

Coordination: Allan Quadros. Number of members: 3.

#### 2. Methods and Inference on Clustering

2017 - now

Description: Study and development of new clustering methods and algorithms.

Coordination: Prof. André Cançado. Number of members: 5.

# 1. Students' Risk Assessment - University of Brasilia

2016 - 2017

Description: Use of Sequence Analysis, Markov Chain, and Logistic Regression to evaluate the risk of students dropping their courses.

Coordination: Prof. Donald Pianto. Number of members: 10.

#### OTHER WRITING

Who is afraid of Math? (Portuguese title: Quem tem medo de Matemática?).

**Allan Quadros**. A book to help people overcome their fear of mathematics. *In preparation*.

# **TEACHING**

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

# **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

# 5. Outstanding Student Award

Sep. 2018

Honor conceded by the Department of Statistics at UnB to the student with the highest GPA by the time of the graduation.

# 4. Standout Project in Contract Management

Sep. 2018

Awarded to FisFa at the 4th ANGC Awards - Best Initiatives of the Year on Contract Management, National Association of Contract Managers, Brazil.

- 3. 1st Place Strengthening Internal Controls in Public Administration Dec. 2016 Awarded to FisFa App at CGU's 4th Good Practices Contest, Ministry of Transparency and Comptroller-General of the Union, Brazil.
- 2. 1st Place (of 14) at Estágio de Instrução e Preparação de Oficiais Temporários (EIPOT) (Army Reserve Officers' Training Corps Professional Internship) Jul. 2014 Officer Candidate with the highest grade in the State of Sao Paulo by the end of the military professional internship, 2nd Military Region, Brazilian Army.
- 1. 2nd Place (of 25) at Núcleo de Preparação de Oficiais da Reserva (NPOR) (Army Reserve Officers' Training Corps Basic Course)

  Dec. 2013

| Officer Student with the second Brazilian Army. | highest grade by | the time of the | graduation. | NPOR Campinas-SI |
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