Allan Vieira de Castro Quadros

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EDUCATION

University of Brasilia - UnB
B.Sc. in Statistics 2018
Statistics Department "Outstanding Student" Award recipient

State University of Campinas - Unicamp
M.Sc. in Economic Development 2012
Full Teaching degree (B.Ed.) in Geography 2008

INTERESTS

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

EMPLOYMENT

Consulting
Statistics and Data Science Consultant Jul. 2017 - now

National Fund for Educational Development - FNDE
Educational Financing Specialist May 2013 - now

RCX Investments
Registered Investment Adviser Jul. 2011 - Jan. 2012
accredited by the Brazilian Investment Advisers 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 Fiscalization*). 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.*

SUBMITTED MANUSCRIPTS

Astrostatistics:

Beaklini P., **Quadros A.**, Avellar M., Dantas M. L., Cançado A. **"Radio Loud and Radio Quiet dichotomy: a Gaussian Mixture Models analysis".** Submitted, 2019

CONFERENCE PAPERS

Economics:

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

Applied Statistics:

1. Barreto M., Malheiros T., **Quadros A.**, Serra L. **"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.

TALKS, PRESENTATIONS AND SEMINARS

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.

1. **(poster) "Identifying undergraduate 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.

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 - 2018
   Description: Study and development of new clustering methods and algorithms.
   Coordination: Prof. André Cançado. Number of members: 5.

1. **Undergraduate Courses Risk Assessment - University of Brasilia**   2016 - 2017
   Description: Use of Sequence Analysis, Markov Chain, and Logistic Regression to evaluate the

risk of students not graduating on time.
Coordination: Prof. Donald Pianto. Number of members: 10.

OTHER WRITING

Quadros, A. "Who is afraid of Math?" (*Portuguese title: Quem tem medo de Matemática?*).
A book to help people overcome their fear of mathematics. *In preparation.*

TEACHING

11. Data Analysis with R - Fast Intermediate Level — Aug. 2019
Instructor, FNDE, 15 hours

10. Data Analysis with R - Fast Introductory Level — Jul. 2019
Instructor, FNDE, 15 hours

9. Data Analysis with R - Intermediate Level — Jul. 2018
Instructor, FNDE, 28 hours

8. Data Analysis with R - Introductory Level — Jan. 2018
Instructor, FNDE, 21 hours

7. Business Economics — Fall, 2012
Lecturer, MBA in Financial Management and Accounting, UniFAJ

6. International Trade — Spring and Fall, 2012
Lecturer, UniFAJ

5. Introduction to Economics — Fall, 2012
Lecturer, UniFAJ

4. Management and International Trade — Spring, 2012
Invited Lecturer, MBA, Mackenzie Presbyterian University

3. GL600: Market Studies and Marketing — Spring, 2011
Teaching Assistant, Unicamp

2. Macroeconomics — 2010 - 2012
Lecturer, UniFAJ

1. Microeconomics — 2010 - 2012
Lecturer, UniFAJ

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
(4.9641/5.0) in 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.