

# Guilherme Jacob

Data Analyst, with background in Law and Economics

## personal

Brazilian  
21/06/1991

## contact

Rua Rio Juruá, 65-C  
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Manaus, Amazonas  
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## languages

Portuguese - native  
English - fluent  
French - basic

## softwares

R, Python, SAS,  
Stata, SPSS,  
X-12-ARIMA, CPro,  
SQL, LaTeX & Office

## expertise

data analysis,  
complex surveys,  
statistical programming,  
econometrics,  
mathematical modeling,  
monitoring and evaluation,  
public policy,  
poverty and inequality,  
rights-based approach.

## education

- 2014 **Refresher Course in Economic Theory** Rio de Janeiro Federal University (UFRJ)  
*Refresher course in microeconomics, macroeconomics, mathematics, statistics, econometrics and Brazilian economy.*
- 2009–2013 **B.Sc. in Economics** Amazonas Federal University (UFAM)  
*Brazilian Economic Model in the 2000s: an economic analysis from Keynes and Furtado*  
My bachelor thesis proposed a new formula for the Mundell-Fleming model, including a hypothesis on the relationship between consumption, imports and inequality.  
Overall Score: 8.39 out of 10.0.
- 2008–2013 **B.A. in Law** Faculdade Martha Falcão DeVry (FMF)  
*Socio-economic Aetiology of Crime*  
My bachelor thesis studied the relationship of poverty, inequality, and education as causative factors of criminality, combining the analysis of criminological theories and empirical testing of statistical models.  
Overall Score: 7.98 out of 10.0.

## professional experiences

- 2015–2017 **United Nations Children's Fund (UNICEF)** Brasília, Distrito Federal  
*UNV Monitoring and Evaluation Officer*  
Monitoring and evaluation of public policies, focusing on children and adolescents.  
Analysis of health, education, violence and poverty data from public records and complex survey samples.  
Also working on innovative initiatives using mobility data from mobile phones, information poverty measurement, and supporting Zika virus epidemiological data analysis.
- 2015–2015 **United Nations Children's Fund (UNICEF)** Manaus, Amazonas  
*Consultant*  
Review and consolidation of social statistics about children and adolescents for the SITAN Report.
- 2014–2015 **Oswaldo Cruz Foundation (Fiocruz) / Ministry of Health / Brazil** Manaus, Amazonas  
*Consultant*  
Consultancy on data collection and analysis of social statistics for the Situation Analysis of children in the Brazilian Amazon, combining equity focus and rights-based approach. This diagnostic aims to promote more inclusive policies for the most disadvantaged children.
- 2014–2014 **United Nations Children's Fund (UNICEF)** Manaus, Amazonas  
*Consultant*  
Collect data and support the analysis of the social and economic statistics of 50 municipalities with the worst living conditions in the Brazilian Amazon. Special focus on children and adolescents.

- 2014 **Amazonas Sustentável Foundation** Manaus, Amazonas  
*Consultant*  
 Questionnaire data analysis of Mathematics and Portuguese test performance of students in riverside schools of 8 municipalities of the Amazonas State.
- 2014 **Norte MC Consultores Ltda.** Manaus, Amazonas  
*Consultant*  
 Seasonal adjustment of industrial production by technological intensity data from January, 2002 to December, 2013. Development of programming routines for the X-12-ARIMA program. Results used in "Carta IEDI n.619", publication of the Institute of Studies for Industrial Development (IEDI).
- 2014 **National Council for Scientific and Technological Development (CNPq)**  
 Tabatinga, Amazonas and Manaus, Amazonas  
*Consultant*  
*Funding Institutions:* National Council for Scientific and Technological Development (CNPq), Amazonas State Research Support Foundation (FAPEAM) and United Nations Children's Fund (UNICEF).  
 Development of data entry application for mobile devices and database set up, using CPro. Technical support.
- 2013-2014 **United Nations Children's Fund (UNICEF)** Manaus, Amazonas  
*Consultant*  
 Collect data and support cluster analysis of Brazilian Amazon municipalities. Analysis of socio-economic indicators. This task was part of UNICEF "Selo Município Aprovado" (Municipal Seal of Approval).
- 2013 **Norte MC Consultores Ltda.** Manaus, Amazonas  
*Consultant*  
 Seasonal adjustment of industrial production by technological intensity data from January, 2002 to August, 2013. Development of programming routines for the X-12-ARIMA program.

## academic experiences

- 2015-2015 **Technical Support** Amazonas State Research Support Foundation (FAPEAM)  
 Research conducted in partnership between UFAM and FAPEAM  
 Technical support in the research project "Wealth Measures for Amazonas". Analysis of Amazonas' inequality and poverty indices, using the National Household Survey (PNAD). Production of statistical algorithms for analysing data from household surveys under complex sample design.
- 2013 **Public Tender – Call Notice n.18/2013** Amazonas Federal University  
*Subject:* Quantitative Methods in Economics  
*Written Test Result:* 5.36  
*Ranking:* 2nd place.
- 2012-2013 **Research Assistant** Institute of Applied Economic Research (IPEA)  
 Research conducted in partnership between UFAM and IPEA  
 Extraction and analysis of income and consumption micro data from the Family Budget Survey (2002-2003). Also, author of the methodological report for IPEA.
- 2012 **Volunteer Teaching Assistant in International Economics** UFAM

2011-2012	<b>Scientific Initiation Fellow (PIBIC)</b> <i>Details:</i> Questionnaire application and data analysis about the profile of the Economics students in UFAM.	UFAM/CNPq
2011	<b>Fellow Teaching Assistant in Microeconomic Theory I</b>	UFAM
2010	<b>Fellow Teaching Assistant in Introduction to Economics: Macroeconomics</b> UFAM	

## technical and scientific production

2017	<b>Guest Reviewer in Scientific Journal</b> Special edition for the "New Techniques and Technologies for Statistics" Conference (NTTS), with the Collaboration in Research and Methodology for Official Statistics (CROS/EUROSTAT). Editorial Collaborators, 2017, 33(4), pp. 1093-1099.	Journal of Official Statistics
2017	<b>Co-author of Book Chapter</b> Análise de dados utilizando as libraries survey e convey do R Chapter in "Statistics With R: Inovação no Mercado Profissional", a book composed of articles presented at the <i>International Seminar of Statistics with R</i> at the Fluminense Federal University.	
2017	<b>UNICEF Brazil Publication</b> Boas Práticas: água e saneamento nas escolas do Semiárido Report on good practices on WASH (water and sanitation) for schools in the Brazilian Semi-arid.	
2016	<b>UNICEF Brazil Working Paper</b> Statistical inference for poverty and inequality measures using R "convey" package Author. Part of UNICEF Monitoring and Evaluation Team capacity building.	
2016	<b>R package</b> convey: Income concentration analysis with complex survey samples Co-author. Focus on inequality measurement, subgroup decomposition and variance estimation algorithms.	
2014	<b>Article in Scientific Journal</b> Law, Economics and Criminology: on a method for public policy formulation Co-author. Article published in "Revista de Produção Acadêmico-Científica do Ciesa", Ano 1, v. 1, n. 1, jul.-dec., 2014.	
2014	<b>Technical Report</b> Employment, income and indigenous economy in Tabatinga Author. Report for UNICEF, based on the Indigenous Population Census of Tabatinga.	
2014	<b>Translation to Portuguese</b> NORTH, Douglass. <i>An outline of the process of economic change.</i> Chapters I-V. Unpublished Work.	
2013	<b>Handout</b> Co-author. Handout used to support "Econometrics I" undergraduate course.	Econometrics I
2011	<b>Presentation</b> Profile of UFAM's Economics Students and their identification with the course <i>Banner presentation</i> on II UFAM's Economics Course Week.	

## training courses

2017	<b>Results-Based Management (RBM)</b>	UNICEF Agora Platform
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2017	<b>United Nations Human Rights Responsibilities</b>	UNICEF Agora Platform
2016	<b>Immunization Coverage Data</b>	UNICEF Agora Platform
2016	<b>Introduction to Ethics in Evidence Generation</b>	UNICEF Agora Platform
2016	<b>Gender Equality UN Coherence and You</b>	UNICEF Agora Platform
2016	<b>The Data Scientist's Toolbox</b>	Coursera
2015	<b>Ethics and Integrity at UNICEF</b>	UNICEF Agora Platform

## interests

Data analysis, statistical programming, quantitative methods, public policy, monitoring and evaluation, economic development, human rights, rights-based approach, Law and Economics.