Last update: September 2023

# AMILCAR VELEZ

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#### **EDUCATION**

# Northwestern University

Ph.D. Candidate in Economics

Sep 2019 - Present

M.A. in Economics

2020

# Instituto Nacional de Matemática Pura e Aplicada (IMPA)

M.S. in Mathematics

2015

## Pontificia Universidad Católica del Perú (PUCP)

B.A. in Economics

2014

#### PUBLISHED PAPERS

- 1. Posterior Distribution of Non-differentiable Functions, joint with Toru Kitagawa, José Luis Montiel Olea, and Jonathan Payne, *Journal of Econometrics*, Vol. 217 (1), pp. 161-175, 2020.
- 2. On the Robustness to Misspecification of  $\alpha$ -posteriors and Their Variational Approximations, joint with Marco Avellana, José Luis Montiel Olea, and Cynthia Rush, **Journal of Machine Learning Research**, Vol. 23 (147), pp. 1-51, 2022.
- 3. The A/B Testing Problem with Gaussian Priors, joint with Eduardo M. Azevedo, David Mao, and José Luis Montiel Olea, *Journal of Economic Theory*, Vol. 210, pp. 1-23, 2023.
- 4. A User's Guide for Inference in Models Defined by Moment Inequalities, joint with Ivan A. Canay and Gaston Illanes. *Accepted at Journal of Econometrics*.

## WORKING PAPERS

- 5. Representation Learning in Linear Factor Models, joint with José Luis Montiel Olea.
- 6. The out-of-sample prediction error of the  $\sqrt{LASSO}$  and related estimators, joint with José Luis Montiel Olea, Cynthia Rush, and Johannes Wiesel.
- 7. The Local Projection Residual Bootstrap for AR(1) Models.
- 8. Linear IV Model with Incomplete Data on the Instrumental Variable.

#### WORK IN PROGRESS

- 9. Inference on Treatment Effects under Covariate-Adaptive Randomization and Imperfect Compliance, joint with Federico Bugni, Mengsi Gao, and Filip Obradovic.
- 10. The return of the (smooth) function model.

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### RESEARCH EXPERIENCE

\* Research Assistant, Prof. Federico A. Bugni (Northwestern University). Summer 2022, Winter 2023

\* Research Assistant, Prof. Ivan A. Canay (Northwestern University).

Fall 2020, Winter 2021

### TEACHING EXPERIENCE

\* Instructor, Econometrics Review, Northwestern University (Graduate). Summer 2023

\* Teaching Assistant, Econ 480-1, Northwestern University (Graduate).

Fall 2021

\* Teaching Assistant, Econ 480-3, Northwestern University (Graduate).

Spring 2021, 2022

\* Teaching Assistant, Econ 281, Northwestern University (Undergraduate). Winter 2022, Spring 2023

\* Teaching Assistant, Econ 329, Northwestern University (Undergraduate).

Fall 2022

### PROFESSIONAL EXPERIENCE

#### Referee Service

\* AER: Insights.

# Central Bank of Perú (BCRP)

\* Macro Modelling Division.

D: 110, 121, D: 11

\* Financial Stability Division. (on leave 2015)

May 2014 - Apr 2018

May 2018 - Jul 2019

# AWARDS, FELLOWSHIPS, AND SCHOLARSHIPS

$\star$ University Fellowship by The Graduate School: Northwestern University.	2019
$\star$ Best Employee at Central Bank of Perú by leading the estimation team.	Jun 2018
$\star$ CNpQ Scholarship: Brazilian Government Scholarship.	2015
$\star$ IMPA Visiting Student Scholarship.	Jan - Feb 2015
$\star$ 61st Summer Program at BCRP approved with distinction.	2014
$\star$ BEAS-PUCP Scholarship: for outstanding lower-income students.	2011-14
$\star$ IMPA Summer Program Scholarship.	2009-10, 12-13
$\star$ PUCP Scholarship: by outstanding performance in competitions abroad.	Aug 2009 - 2010
$\star$ Silver Medal in the 24th & 23rd Iberoamerican Mathematical Olympiad.	2008 & 2009
$\star$ Bronze Medal in the 49th International Mathematical Olympiad, Spain.	2008