

# AMILCAR VELEZ

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## EDUCATION

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### 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

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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

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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. Submitted
7. The Local Projection Residual Bootstrap for AR(1) Models. Submitted
8. Linear IV Model with Incomplete Data on the Instrumental Variable.

## WORK IN PROGRESS

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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.

**RESEARCH EXPERIENCE**

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- ★ 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**

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- ★ 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**

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**Referee Service**

- ★ AER: Insights.

**Central Bank of Perú (BCRP)**

- ★ Macro Modelling Division. May 2018 - Jul 2019
- ★ Financial Stability Division. May 2014 - Apr 2018  
(*on leave 2015*)

**AWARDS, FELLOWSHIPS, AND SCHOLARSHIPS**

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- ★ Robert Eisner Graduate Fellowship: Northwestern University 2023
- ★ University Fellowship by The Graduate School: Northwestern University. 2019
- ★ Best Employee at Central Bank of Perú by leading the estimation team. Jun 2018
- ★ CNpQ Scholarship: Brazilian Government Scholarship. 2015
- ★ IMPA Visiting Student Scholarship. Jan - Feb 2015
- ★ 61st Summer Program at BCRP approved with distinction. 2014
- ★ BEAS-PUCP Scholarship: for outstanding lower-income students. 2011-14
- ★ IMPA Summer Program Scholarship. 2009-10, 12-13
- ★ PUCP Scholarship: by outstanding performance in competitions abroad. Aug 2009 - 2010
- ★ Silver Medal in the 24th & 23rd Iberoamerican Mathematical Olympiad. 2008 & 2009
- ★ Bronze Medal in the 49th International Mathematical Olympiad, Spain. 2008