

IGNACIO SARMIENTO-BARBIERI

Department of Economics, University of Los Andes
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ACADEMIC EMPLOYMENT

University of Los Andes, Colombia.

Associate Professor, *tenured*, Department of Economics.

2023 -

Assistant Professor, Department of Economics.

2020 - 2023

Revista Desarrollo y Sociedad

Editor

2024 -

National Center for Supercomputing Applications (NCSA-UIUC).

Postdoctoral Research Associate in Data Science in Applied Microeconomics.

2018 - 2020

EDUCATION

University of Illinois at Urbana-Champaign, USA.

Ph.D. in Economics.

2018

M.S. in Statistics.

2017

M.S. in Economics.

2014

National University of Tucumán - Argentina.

B.A. in Economics (*with honors*).

2008

FIELDS

Primary: *Public, Urban, and Real Estate Economics*.

Secondary: *Applied Econometrics, Big Data, and Machine Learning*.

PUBLICATIONS

Pro-poor transport subsidies: More user welfare and faster travel. *Transportation Research Part A: Policy and Practice* 195 (2025): 104454. with Guzman, Luis A., Jorge Luis Ochoa, and Santiago Gómez Cardona

Housing Discrimination and the Toxics Exposure Gap in the United States: Evidence from the Rental Market. *The Review of Economics and Statistics* (2022) 104 (4): 807–818, NBER WP No. 26805, with Peter Christensen and Chris Timmins.

Prediction of SARS-CoV-2 infection with a Symptoms-Based model to aid public health decision making in Latin America and other low and middle income settings. *Preventive Medicine Reports* 27 (2022) 101798, with Andrea Ramirez Varela, Luis Jorge Hernandez Florez, et al.

COVID-19 spread, detection, and dynamics in Bogotá, Colombia. *Nature Communications*, Vol 12, 4726, 2021, CEDE WP No. 18-2021, RedNIE WP No. 78, with Rachid Laajaj, Camilo de los Rios, et al.

Factors Associated With SARS-CoV-2 Infection in Bogotá, Colombia: Results From a Large Epidemiological Surveillance Study. *The Lancet Regional Health - Americas*, 2021, 100048, with Andrea Ramirez Varela, Luis Jorge Hernandez Florez, et al.

Can we stay one step ahead of cheaters? A field experiment in proctoring online open book exams. *Journal of Behavioral and Experimental Economics* 90, 2021, 101653, with Jose Vazquez and Eric Chiang.

Emotional Cues and Crime: Spatial and Temporal Evidence from Brazilian Soccer Games. *Economic Inquiry*, Vol. 59, No. 1, January 2021, 375–395, with Qi Ge and Rodrigo Schneider.

	Unlocking Amenities: Complementarities in Public Good Consumption. <i>Journal of Public Economics</i> 182 (2020), NBER WP No. 25107, with David Albouy and Peter Christensen.																				
	Do More Eyes on the Street Reduce Crime? Evidence from Chicago's Safe Passage. <i>Journal of Urban Economics</i> 110 (2019), with Dan McMillen and Ruchi Singh.																				
SELECTED WORKING PAPERS	<p>Racial Discrimination and Housing Outcomes in the United States Rental Market. <i>NBER WP No. 29516</i>, with Peter Christensen and Christopher Timmins.</p> <p>Do human proctors and anxiety affect exam scores in open-book online exams? A field experiment. <i>REDNIE WP No 320</i> with Jose Vazquez and Eric Chiang. (<i>submitted</i>)</p> <p>Can't Stop the One-Armed Bandits: The Effects of Access to Gambling on Crime, with Nicolas Bottan and Andrés Ham.</p> <p>Who's at risk on the road? Predicting novice driver risk in low-to-middle-income contexts, with Luis Angel Guzman, Darío Hidalgo, Alex Quistberg and Olga Lucia Sarmiento. (<i>submitted</i>)</p>																				
SELECTED WORK IN PROGRESS	<p>Do class-based cues shape interactions in the housing market? with Leopoldo Ferguson y Gabriela Mejia</p> <p>Reducing Crime Without the Police? Evidence from a Place-Based Infrastructure Intervention in Bogotá, Colombia, with Michael Weintraub and Olga Lucia Sarmiento.</p>																				
SELECTED OTHER PUBLICATIONS	<p>Proyecto CoVIDA. <i>Policy Note No. 40, University of Los Andes. Colombia</i>, with Rachid Laajaj, Camilo de los Rios, et al.</p> <p>The South American input-output table: Key assumptions and methodological considerations. <i>ECLAC, NU 2016</i>. Associate Researcher for Argentina, Ecuador and Paraguay.</p>																				
TEACHING EXPERIENCE.	<p>University of Los Andes, Colombia.</p> <p><i>Department of Economics, Full Instructor.</i></p> <table> <tr> <td>Big Data and Machine Learning for Applied Economics (Graduate).</td> <td>2020-</td> </tr> <tr> <td>Urban Economics (Graduate).</td> <td>2021-</td> </tr> <tr> <td>Doing Economics I (Undergraduate).</td> <td>2021-2024</td> </tr> <tr> <td>Thesis Seminar (Graduate).</td> <td>2021, 2023, 2024, 2025</td> </tr> </table> <p><i>Department of Engineering, Full Instructor.</i></p> <table> <tr> <td>Unsupervised Learning (<i>in partnership with Coursera</i>) (Graduate).</td> <td>2022-</td> </tr> <tr> <td>Advanced Models for Data Analysis (Graduate).</td> <td>Summer 2022</td> </tr> </table> <p>University of Illinois at Urbana-Champaign, USA.</p> <p><i>Department of Economics, Teaching Assistant.</i></p> <table> <tr> <td>Econ 102 (Undergraduate).</td> <td></td> </tr> <tr> <td>Online.</td> <td>2014-2018</td> </tr> <tr> <td>Face to Face.</td> <td>2013</td> </tr> </table> <p>National University of Salta, Argentina.</p> <p><i>Masters in Development Economics, Full Instructor.</i></p> <table> <tr> <td>Microeconomics (Graduate).</td> <td>2021</td> </tr> </table>	Big Data and Machine Learning for Applied Economics (Graduate).	2020-	Urban Economics (Graduate).	2021-	Doing Economics I (Undergraduate).	2021-2024	Thesis Seminar (Graduate).	2021, 2023, 2024, 2025	Unsupervised Learning (<i>in partnership with Coursera</i>) (Graduate).	2022-	Advanced Models for Data Analysis (Graduate).	Summer 2022	Econ 102 (Undergraduate).		Online.	2014-2018	Face to Face.	2013	Microeconomics (Graduate).	2021
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Department of Economics, Head Teaching Assistant.

Intermediate Microeconomics.	2009-2012
Labor Economics.	2009-2012
Development Economics.	2009-2012
Mathematical Economics.	2009-2012

National University of Tucumán, Argentina.

Department of Economics, Undergraduate Teaching Assistant.

Price Theory I & II.	2006-2009
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Workshops.

<i>Machine Learning for Marketing,</i> University of Los Andes, Colombia.	2024
<i>Doing Open Science,</i> University of Los Andes, Colombia.	2024
<i>Big Data and Machine Learning for Real Estate,</i> Continuing Education, University of Los Andes.	2021-2023
<i>Doing Open Science: Experiment Design, Software, and Data in Research,</i> University of Los Andes, Colombia.	2022
<i>Data Science for decision making in Economics,</i> University del Norte, Colombia.	2022
<i>Big Data and Machine Learning for Business,</i> Universidad Surcolombiana, Colombia.	2021
<i>Spatial Econometrics,</i> 9th Midwest Graduate Student Summit in Applied Economics, AERUS.	2016
<i>Labor Market, Poverty and Inequality: An Application of the Permanent Household Survey</i> UNSTA, Tucumán, Argentina.	2008-2010

AWARDS AND GRANTS

SPIA Country Study, CGIAR, Colombia, 2025-2027. Catalyst Grant for Advancing Transparent, Reproducible and Ethical Research, Berkeley, 2024. BITSS Catalyst Grant for Advancing Transparent, Reproducible and Ethical Research, Berkeley, 2024. BITSS Catalyst Grant for Advancing Transparent, Reproducible and Ethical Research, Berkeley, 2021. Outstanding 2019-2020 SPIN Mentor, NCSA-UIUC, 2020. Outstanding Summer 2019 SPIN Mentor, NCSA-UIUC, 2019. Doctoral Session Travel Grant, AREUEA, 2017. Outstanding Contribution in Reviewing, RSUE, 2017. Paul W. Boltz Fellowship, Department of Economics, UIUC, 2017. Conference travel award, Department of Economics, UIUC, 2016, 2017. Econometrics team captain for the VSAE Econometric Games, Department of Economics, UIUC, 2016, 2017, 2018. Summer Fellowship, Department of Economics, UIUC, 2015. Departmental Fellowship, Department of Economics, UIUC, 2012-2013. Fulbright Scholarship, United States Department of State, 2012-2014. Best GPA of the 15th cohort Ms. in Economics, Department of Economics, UNLP, Argentina, 2012. Departmental Fellowship, UNLP, Argentina, 2011-2012. First CEDLAS Contest, essays on distributional, labor and social issues in Latin America (runner up), UNLP, Argentina, 2009. Research Fellowship, Research Council, UNT, Argentina, 2009-2010. Second Best GPA of the 2008 cohort in Economics, UNT, Argentina, 2008. Third Best GPA of the 2008 cohort of the three majors: Economics, Business, and Accounting, UNT, Argentina, 2008.

CONFERENCE PRESENTATIONS, INVITED TALKS	19th Meeting of the Urban Economics Association, Montreal, Canada, 2025, AREUEA International Conference, Barcelona, Spain, 2025. 14th European Meeting of the Urban Economics Association, Berlin, Germany, 2025. 13th European Meeting of the Urban Economics Association, Copenhagen, Denmark 2024. RedNIE, Buenos Aires, Argentina, 2024 .ESCP Madrid, Spain, 2023. Universidad Loyola, Sevilla, Spain, 2023. Universidad de Granada, Granada, Spain, 2023. RedNIE, Buenos Aires, Argentina, 2022. Salurbal, Drexel University, 2022. Department of Economics, University of La Plata, Buenos Aires, Argentina, 2022. Department of Economics, University of República de Uruguay, Montevideo, Uruguay, 2022. CAPP, Bogota, Colombia, 2021. Department of Economics, Di Tella University, Buenos Aires, Argentina, 2021. SurColombiana University, Colombia, 2021. AREUEA International Conference (discussant), 2021. RedNIE, Buenos Aires, Argentina, 2021. Department of Economics, University of Andes, Bogotá, Colombia, 2020. Università Cattolica del Sacro Cuore, Milano, Italy, 2020. FEN-Department of Economics, University of Chile, Santiago, Chile, 2020. Department of Economics, University of Los Andes, Santiago, Chile, 2020. University Adolfo Ibañez, Viña del Mar, Chile, 2020. pERE-ACES-UIUC, Urbana-Champaign, IL, 2019. San Pablo University and National University of Tucumán, Tucumán, Argentina, 2019. 13th Meeting of the Urban Economics Association, New York City, NY, 2018. 86th International Atlantic Economic Conference, New York City, NY, 2018. AEA CTREE Conference 2018, TX, May 2018. 82nd Annual Meeting of the Midwest Economics Association (MEA), Evanston, IL, 2018. American Real Estate and Urban Economics Association (AREUEA) Doctoral Session, Philadelphia, PA, 2018. American Real Estate and Urban Economics Association (AREUEA) Doctoral Session, Chicago, IL, 2016. 7th European Meeting of the Urban Economics Association, Copenhagen, Denmark, 2017, 11th Meeting of the Urban Economics Association, Minneapolis, MN, 2016. 47th Annual Conference of the Mid-Continent Regional Science Association. Charlotte, NC, 2016. 9th Midwest Graduate Student Summit in Applied Economics, Urban and Regional Studies, Urbana-Champaign, IL, 2016.
OTHER PROFESSIONAL AFFILIATIONS	<p>SPIA Country Affiliate (Colombia), <i>Standing Panel on Impact Assessment (SPIA)</i>, CGIAR Independent Advisory and Evaluation Service. Rome, Italy. 2025-2026</p> <p>BITSS Catalyst, <i>Berkeley Initiative for Transparency in the Social Sciences</i>. Berkeley, USA. 2021 -</p> <p>Affiliated Faculty, <i>Center for Research and Formation in Artificial Intelligence</i>. University of Los Andes, Colombia. 2020 -</p> <p>Senior Researcher, <i>National Network of Researchers in Economics (RedNIE)</i>, Argentina. 2020 -</p>
REFeree SERVICES	Journal of Political Economy Microeconomics, Journal of Urban Economics, Canadian Journal of Economics, Regional Science and Urban Economics, Land Economics, Economica, Journal of Environmental Economics and Management, International Review of Economics Education, Applied Economics, Real Estate Economics, Journal of Real Estate Finance and Economics, Desarrollo y Sociedad.
ORGANIZING COMMITTEES	<p><i>Committee for the Creation of the Undergraduate Program in Data Science</i>, University of Los Andes 2024-2025</p> <p><i>Econometrics Reading Group</i>, UIUC. 2015-2016</p> <p><i>26th Annual Meeting of the Midwest Econometrics Group</i>, UIUC. 2016</p>
OTHER EMPLOYMENT	<p>SALURBAL, Drexel University. 2022</p> <p><i>Short Term Consultant - Statistical Analysis Coordinator</i>.</p> <p>National Road Safety Agency, Ministry of Transport- University of Los Andes. 2021</p> <p><i>Short Term Consultant - Statistical Analysis Coordinator</i>.</p> <p>United Nations Development Programme. 2021</p> <p><i>External Reviewer</i>.</p>

SOFTWARE	<i>R packages</i>	
	RATest: A collection of randomization tests.	2017
	<i>with Mauricio Olivares-Gonzalez. Available at CRAN</i>	
	ioanalysis.	2019
	<i>with John Wade. Available at CRAN</i>	
SKILLS	R, Stata (advanced), Python, Unix System Administration, SQL, GIS, HTML (intermediate), Matlab, PHP, C++, Fortran (basic).	
PERSONAL	Citizenship: <i>Argentinean & Italian.</i>	
INFORMATION	Languages: <i>Spanish (native), English (advanced), Italian (intermediate), Classic Latin and Greek (basic).</i>	