Silvio R. Rendon

Phone: 1-917-528-5119 Email: <u>rensilvio@gmail.com</u> CV Date: December 2025

Experience

12/2025-present: Finance Fellow, Human Frontier Collective, Scale AI.

Selected as a domain expert to evaluate and train frontier generative AI models on complex financial reasoning, valuation methodologies (DCF), and risk assessment. Develop rigorous evaluation frameworks to test model performance on economic tasks, ensuring AI outputs align with fundamental economic principles and regulatory standards. Collaborate with AI research teams to identify model hallucinations and logic gaps, directly contributing to the improvement of foundational models used by enterprise clients.

08/2025-present: AI Research Consultant (Independent Contractor), Mercor.

Train and fine-tune Large Language Models (LLMs) to improve accuracy, relevance, and analytical depth for complex research in economics and quantitative finance. Apply subject matter expertise in labor and financial economics to guide model development and ensure the coherence of AI-generated research outputs. Develop and implement strategies for leveraging generative AI to accelerate and enhance quantitative economic analysis.

08/2025-present:. Adjunct Professor, Georgetown University. Course: Introduction to Econometrics.

- 07/2023-07/2025. *Quantitative Analytics Tech Lead*, Federal Home Loan Mortgage Corporation (Freddie Mac) Model development, Estimation, and production of internal credit scores. Research on impact of Fresh Start program on mortgage risk. Intense Machine Learning Applications with XGBoost in Python. Proposed a utility-based method for feature selection. Reports on the economic juncture, in particular about mortgage defaults by student loan status. Worked on several projects on Single Family: Mapping Tool for FACS score with Vantage Scores, Data Quality Reviews, Hackathon. I recently developed a Credit Dashboard of several financial products for internal purposes.
- 01/2022-01/2023. Executive Director, Board of Executive Directors, Inter-American Development Bank.
 Review and approve loans for development projects, financial statements, and development strategies in the Latin American and Caribbean region. Vice-President of Bid-Invest Committee of the Board of Executive Directors Analyze evidence-based risk assessments for the IDB, with particular focus on BID Invest, the private sector window of the IDB.
- 09/2019-12/2021. *Principal Financial Economist*, Supervision, Regulation and Credit, Federal Reserve Bank of Philadelphia.
- 07/2014-08/2019: Senior Financial Economist/ Senior Financial Specialist, Supervision, Regulation and Credit, Federal Reserve Bank of Philadelphia.

Model development for Dodd-Frank CCAR stress test models. Lead of the HELOC Team. Bank examination of stress test and CECL models. Horizontal Capital Review LISCC firms. Research on Retail Products using big data on mortgages, credit cards, home equity loans, student loans. Financial Stability Briefings.

09/2007-07/2014: Assistant Professor, Department of Economics, Stony Brook University.

Research on Economics, Applied Econometrics, Macroeconomics. Publications in academic journals and presentations in conferences in economics. Teaching of Econometrics, Microeconomics, Labor Economics. Mentoring of Undergraduate and Graduate Students.

09/2008-07/2014: Affiliated Faculty, Latin American and Caribbean Studies Center, Stony Brook University. 09/2004-08/2007: Assistant Professor, Department of Economics, Instituto Tecnológico Autonómo de México (ITAM), Mexico.

09/2003-08/2004: Visiting Assistant Professor, Department of Economics, University of Western Ontario, Canada.

09/2001-08/2003: Visiting Professor, Department of Economics, Universidad Carlos III, Spain.

09/1997-08/2003: Assistant Professor, Department. of Economics, Universitat Pompeu Fabra, Spain.

09/1994-08/1997: Instructor of Economics, Research Assistant (Prof. Boyan Jovanovic), Department of Economics, New York University.

Education

09/1997: Ph.D. in Economics, New York University. Dissertation: "Job Search and Asset Accumulation

Under Borrowing Constraints". Advisors: Christopher Flinn and Kenneth Wolpin

09/1995: *M.Phil. in Economics*, New York University.

09/1988: BA in Economics, Universidad Católica del Perú, Peru.

Skills

<u>Languages:</u> English, Spanish, German, French, Italian, Catalan, Portuguese, Quechua.

Programming: PYTHON, FORTRAN, STATA, SAS, R, GAUSS, SQL.

Publications

Technical Reports

- "Individual and Local Effects of Unemployment on Mortgage Defaults" with Kevin Bazer November 2021. Federal Reserve Bank of Philadelphia. Working Paper 21-39.
- "Understanding Older Student Loan Borrowers" with Charlie Gallagher. CFI in Focus. Consumer Finance Institute. Federal Reserve Bank of Philadelphia. September 22, 2021.

Refereed Journal

- -"How Many Women were Sterilized Without Informed Consent in Peru in the 1990s Government Campaign?" (2025), International Journal of Human Rights in Healthcare (forthcoming).
- "Effects of international sanctions on age-specific mortality: a cross-national panel data analysis" (with Francisco Rodriguez and Mark Weisbrot) (2025) The Lancet, Global Health. Vol 13: e1358–66.
- "Testing for Wage Search Intensity" (2025). Journal for Labour Market Research. Vol 59 (3).
- "Labor Market Effects of Bounds on Domestic Outsourcing" (with Bruno Jimenez) (2025), *Journal of Development Economics*. Vol 173.
- "Is the Global Competitiveness Index by the World Economic Forum a reliable tool for the design of labor market policies? Evidence from Latin American countries" (with Celia P. Vera) (2023) *IZA Journal of Labor Policy*, Vol 13(1), January.
- "Interactions Between Job Search and Housing Decisions: A Structural Estimation" (with Nuria Quella) (2023) *Southern Economic Journal*, Vol 90(2), pages 414-443, October.
- "Does Employment Protection Unprotect Workers? The Labor Market Effects of Job Reinstatements in Peru", (with Bruno Jimenez) (2023), *Labour Economics*, Vol 80, January.
- "Job creation and investment in imperfect financial and labor markets", (2021), *Applied Economic Analysis*, Vol. 30(89), pages 73-91, September.
- "Family Job Search and Wealth: The Added Worker Effect Revisited." (with Ignacio García Perez) (2020), *Quantitative Economics*, Econometric Society, (2020), Vol. 11(4), pages 1431-1459, November.
- "A Truth Commission did not tell the Truth: A rejoinder to Manrique-Vallier and Ball" (2019) *Research and Politics*., April- June: 1–4.
- "Capturing correctly: A reanalysis of the indirect capture—recapture methods in the Peruvian Truth and Reconciliation Commission". (2019), *Research and Politics*. January- March, 1-8.
- "Fixed and Random Effects in Classical and Bayesian Regression," (2013). Oxford Bulletin of Economics and Statistics. Volume 75(3) 460-476.
- "Over-Education in Multilingual Economies: Evidence from Catalonia." (with Maite. Blázquez) (2012), *International Migration*. February.
- "Occupational Selection in Multilingual Labor Markets" (with N. Quella) (2012) *The International Journal of Manpower* Vol 33(8) November.
- "International Job Search: Mexicans in and out of the U.S." (with A. Cuecuecha) (2009). *Review of Economics of the Household* 8(1) pp. 53-82.
- "Employment and Deadweight Loss of Observed Non-wage Labor Costs" (with G. Aguilar) (2010) *Economic Inquiry* 48(3) pp 793-809.
- "Matching Bias in Labor Supply Estimation" (with G. Aguilar) (2008). Economic Letters, 100 pp 297-299.
- "Does Wealth explain Black-White Differences in Early Employment Careers?" (2007). *Journal of Business and Economic Statistics*, 25(4) pp. 484-500.
- "The Catalan Premium: Language and Employment in Catalonia," (2007). *Journal of Population Economics*, 20(3) pp. 669-686.
- "Job Search and Asset Accumulation under Borrowing Constraints" (2006) *International Economic Review*, 47(1) pp. 233-263.
- "Firm Investment in Imperfect Capital Markets: A Structural Estimation" (with S. Pratap) (2003) *Review of Economic Dynamics* 6 (3) pp. 513-545.

Book Chapters

- From stabilization to stagnation? Peru's economy toward the mid-21st century. (Forthcoming in 2025). In Rodriguez, Francisco (ed), "The Elgar Companion to the Economies of Latin America and the Caribbean." Edward Elgar Publishing.
- Involuntary Sterilization, June 2022. In Klaus F. Zimmermann (ed), "Handbook of Labor, Human Resources and Population Economics" Springer Cham.
- Non-Tobin's q in Tests for Financial Constraints to Investment. In Calcagnini, Giorgio; Saltari, Enrico (Eds.) "The Economics of Imperfect Markets," Springer Book Series "Contributions to Economics." 2009, X, 234 p. 22 illus., Hardcover ISBN: 978-3-7908-2130-7.
- Mexicans in and out of the U.S.: Facts on Job Search and International Migration, In Cuecuecha, Alfredo and Claudia Pederzini (Eds.), Migration and Remittances. Trend, Impacts, and New Challenges, Lexington Books, (2012).
- Búsqueda de empleo y acumulacion de riqueza bajo restricciones crediticias, en *Economía Dinámica*, *Economía Aplicada y Teoría de Juegos, Ensayos en Homenaje a Ramón García-Cobián*, César Martinelli y Loretta Gasco (eds.), Fondo Editorial de la Universidad Católica del Perú (2007)

Grants Awarded

Research Grant, Secretary of Labor and Social Prevision of Mexico "Rural Labor Markets in Mexico," 2006.

Research & Development Grant, Ministry of Science and Technology of Spain, "The Welfare State and Labor Markets in Europe," (Project Director: Lluïsa Fuster), 2001-2004;

CICYT Grant, Ministry of Education of Spain, "Perspectives of the Welfare State," (Project Director: Gilles Saint Paul), 1998-2000;

Research Fellowship, Bank of Spain, 1998.

Fellowships

- Research Fellow at IZA, 2007-present.
- Fellow of the Mexican National Research System, 2007-2009. National Council for Science and Technology (CONACYT) SNI Level I.

Review or Referee Service

Quantitative Economics

American Economic Review,
Journal of Political Economy,
Journal of Human Resources,
Journal of Applied Econometrics,
Economic Theory,
Labour Economics,

Review of Economic Studies,
Journal of Labor Economics,
European Economic Review,
Journal of Population Economics,

Journal of Industrial Economics, Economic Inquiry,

Review of Economics of the Household, Journal of Applied Economics Economic Modelling Journal of Educational Change

Southern Economic Journal. Estudios Económicos,

Economics of Education Review, Journal of Benefit-Cost Analysis Agricultural and Resource Economics Review. Latin American Research Review

Communications in Statistics-Theory and Methods

Research Grants for the US-Israel Binational Science Foundation.

Research Grants for the Ministry of Science and Technology of Spain.

Paper Presentations

Conferences

- Southern Economic Association, 2024.
- Society of Government Economists, 2023.
- Eastern Economic Association, Annual Conference 2021, 2015, 2011.
- American Real Estate and Urban Economics Association at ASSA, 2021.

- Society of Economic Dynamics (SED): Missouri 2019, Mexico City 2018, Florence 2004, Stockholm 2001, Alghero 1999;
- North American Summer Meeting of the Econometric Society: Missouri 2017, Boston 2009, Durham 2007.
- 8th IZA Annual Migration Meeting (AM2) and 3rd Migration Topic Week. 2011
- Midwest Macroeconomics Meetings: East Lansing 2010, Philadelphia 2008, Cleveland 2007.
- International Conference on Remittances and Migration at CIDE, Mexico, 2009.
- Transatlantic Meeting of Labor Economist at IZA, Buch am Ammersee, 2008.
- International Conference The Economics of Imperfect Markets: Their Interaction and The Consequences for Economic Theory and Policy, Rome, 2008.
- University of Texas-Austin-ITAM Workshop: 2006, 2005, 2004; Latin American and Caribbean Economic Association (LACEA): Mexico 2006, San Jose 2004, Madrid 2002, Buenos Aires 1998, Bogotá 1997;
- Latin American Meetings of the Econometric Society (LAMES): Mexico 2006, Santiago de Chile 2004, Cancun 1999;
- 13th International Conference on Panel Data, Cambridge, UK, 2006;
- 12th International Conference on Computing in Economics and Finance, Society for Computational Economics, Limassol 2006;
- International Workshop on The Economic Impact of Financial and Labour Market Institutions, Urbino 2006;
- Society of Labor Economics (SOLE), Boston, 2006;
- Third Workshop of the Latin American Finance Network, Inter-American Development Bank, Santiago de Chile, 2006.
- IX Dynamic Macroeconomic Workshop, Vigo 2004;
- European Society of Population Economics (ESPE), (Chicago 2007, Bergen 2004, New York 2003, Bilbao 2002, Athens 2001);
- CentrA-Fundacion Areces Conference "Labor Market Policy Evaluation," Seville 2004;
- Workshop on Numerically Intensive Policy Analysis, Queen's University, Kingston 2004:
- Conference "Interactions between and Financial Markets" at IZA, Bonn, 2003;
- Simposio de Análisis Económico, Salamanca 2002;
- CAM workshop on "Job search, Unemployment and the UI system," Copenhagen 2002;
- 3rd Workshop on Institutional Analysis, Barcelona 2002;
- Applied Econometric Association, Pau 1999;
- Young Economist Meeting, Amsterdam 1999;
- Econometric Society European Meeting (ESEM), Toulouse 1997.

Selected Seminars

Federal Reserve Bank of Philadelphia Georgetown University

Tel Aviv University Federal Reserve Bank of New York

University of Aarhus

Boston College University of Rochester Universidad de San Andrés Carnegie Mellon University,

Federal Reserve Bank of Atlanta, University of Pennsylvania,

Federal Reserve Board, CUNY, Hunter College,

Universidad de Piura Fordham University

Hebrew University of Jerusalem

Central Bank of Peru University of Copenhagen, University of Western Ontario,

University of Albany IGIER, Bocconi Bank of England,

Georgia Tech, School of Economics,

University of Georgetown,

Inter-American Development Bank,

CEMFI, Madrid

Bank of Mexico, Universidad Torcuato Di Tella,

University of Maryland, New York University,

University of Essex, Universitat Autònoma de Barcelona,

Universitat de Girona, El Colegio de México, Queen's University, McMaster University,

Universitat Pompeu Fabra, University of North Carolina Chapel-Hill, Institut zur Zukunft der Arbeit (IZA), Centro de Estudios Andaluces (CentrA).

Universidad Carlos III de Madrid, Universitat de les Illes Balears,

University of Tartu, Università di Modena,

European Economic Institute, Florence, Hebrew University of Jerusalem

Florida International University.

Teaching Experience

2007-2014: <u>Undergraduate</u>: Principles of Economics, Labor Theory, Intermediate

Microeconomics,. Stony Brook.Graduate: Labor Economics; Microeconomics.

Stony Brook.

Falls 2008, 2009, 2011: Econometric Applications in Finance, (Graduate). Central Bank of Peru.

2004-2007: <u>Undergraduate</u> Advanced and Intermediate Microeconomics. <u>Instituto</u>

Tecnológico Autónomo de México, Mexico.

<u>Graduate</u>: Numerical Methods for Economists, Structural Econometrics.

Instituto Tecnológico Autónomo de México, Mexico.

2003-2004: <u>Undergraduate</u>: Applied Econometrics, <u>University of Western Ontario, Canada</u>

Graduate: Applied Econometrics, University of Western Ontario, Canada.

2002-2003: <u>Undergraduate</u>: Macroeconomics II and Mathematics II <u>Universidad Carlos III</u>,

Spain

Winter 2002: Economic Applications of Dynamic Programming (Graduate). <u>Universidad</u>

Católica del Perú.

Summer 2002 Latin American Economics (Graduate). Universidad Alcalá de Henares, Spain.

1997-2001: <u>Undergraduate</u>: Econometrics I, II and III, <u>Universitat Pompeu Fabra, Barcelona</u>,

Spain

<u>Graduate</u>: Microeconometrics, <u>Universitat Pompeu Fabra, Barcelona, Spain</u>

1994-1997: <u>Undergraduate</u>: Principles of Economics. <u>New York University</u>.

PhD Students Supervised

- Jacques Latigue Mendoza, Stony Brook, Main Advisor. Graduation in the Summer of 2013.
- Jieruo Liu, Stony Brook, Co-Advisor. Graduation in the Summer of 2013.
- Yoobin Kim, Co-Advisor, Graduation in the Summer of 2013.
- Jinyoung Eom, Committee Member. Graduation in the Summer of 2013.
- Yi Zhang, Committee Member.. Graduation in the Summer of 2013.
- Patricia Vera, Stony Brook, *Main Advisor*. Graduation in the Summer of 2013.
- Yun-Shan Chan, Stony Brook, *Main Advisor*. Graduation in the Summer of 2012.
- Junyi Zhu, Stony Brook, *Main Advisor*. Graduation in the Summer of 2010.
- Zhe Li, Stony Brook, *Committee Member*. Graduation in the Summer of 2010.
- Anna Nesterenko, Stony Brook, Committee Member. Graduation in the Summer of 2009.
- María Elisa Farías, ITAM, *Main Advisor*. Graduation in the of Summer of 2007. Central Bank of Chile.
- Dörte Dömeland, Universitat Pompeu Fabra, *Main Advisor*. Graduation in the Summer of 2003. World Bank.
- Eduardo Melero Martín, Universitat Pompeu Fabra, *Thesis Committee Member*. Graduation in the Summer of 2003.
- Fernando Muñoz Bullón, Universitat Pompeu Fabra, *Committee Member*. Graduation in the Summer of 2000, Universidad Carlos III, Spain.