

# Jesus Villota Miranda

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## EDUCATION

### PhD in Economics

CEMFI

- *Research Field:* Machine Learning in Finance, Financial Econometrics
- *PhD Committee:* Enrique Sentana (main advisor), Dante Amengual, Rafael Repullo

Sept. 2024 - Current

Madrid, Spain

### MRes. Economics & Finance

CEMFI

- GPA: 8.5/10
- Specialization: Econometrics & Data Science
- Master Thesis: “*Predicting Market Reactions to News: An LLM-Based Approach Using Spanish Business Articles*” (9.5/10)

Sept. 2022 - June 2024

Madrid, Spain

### BA in Business Administration

University of La Rioja

- GPA: 9.5/10. Graduated with Honors
- Specialization: Finance
- Bachelor Thesis: “*Economics of vaccination and herd immunity: public policies and incentives*” (10/10), Honors

Sept. 2018 - June 2022

La Rioja, Spain

### Professional Piano Studies

Eliseo Pinedo Professional Conservatory of Music

- Grade: 10/10

Sept. 2009 - June 2020

La Rioja, Spain

## WORK EXPERIENCE

### Teaching Assistant

CEMFI

- CEMFI MRes: Time Series Econometrics (Jan-March 2025, 2026), Applied Macroeconometrics (April-June 2025), Data Science for Economics (Oct-Dec 2025)
- CEMFI Summer School: Data Science for Economics (CSS-2024, CSS-2025), Using Textual Data in Empirical Monetary Economics (CSS-2025)
- Diploma in Banking Supervision: Python Programming (June 2025)
- Postgraduate Program in Central Banking: Financial Markets and Institutions (Sept-Dec 2025)
- Advanced Training School: Methods for Time Series (November 2025)

Jan. 2025 - Current

Madrid, Spain

### Visiting Researcher

Bank of Spain

- Project: “*The valuation impact of firm-level shocks: An approach using News and ChatGPT*”

July 2024 – August 2024

Madrid, Spain

### Research Assistant for Galo Nuño & Matias Covarrubias

Bank of Spain

- Project: “*Estimation of nonlinear effects to sectoral shocks in a dynamic production network*”

July 2023 – September 2023

Madrid, Spain

### Research Assistant for Roberto Rodríguez-Ibeas

University of La Rioja

- Project “*The value of diagnostics to combat antimicrobial resistance by optimising antibiotic use: VALUE-Dx*”

November 2021 – June 2022

La Rioja, Spain

## PEER-REVIEWED PUBLICATIONS (clickable links)

- “**Simple economics of vaccination: public policies and incentives**”. *International Journal of Health Economics and Management*, 24(2), 155-172. [April 2024]

## WORKING PAPERS (*clickable links*)

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- “Predicting Market Reactions to News: An LLM-Based Approach Using Spanish Business Articles”. Available at SSRN.
- “Is Pairs Trading a Thing of the Past?”. Available at SSRN.
- “Structured Data with LLMs Done Right: A Practical Guide to Text Classification, Information Retrieval and Generation with LLMs”. Available at SSRN.
- “WhaleStreetBets”, joint with Pedro A. García-Ares and Diego Amaya.

## PRESENTATION IN CONFERENCES

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- New Methods BoE Seminar Series - Bank of England (online), November 2025
- XXXII Finance Forum - Asociación Española de Finanzas (AEFIN) - Pamplona (Spain), July 2025
- BSE Summer Forum, Machine Learning in Economics - Barcelona (Spain), June 2025
- 3rd Contemporary Issues in Financial Markets and Banking - Nottingham Trent University (online), January 2025
- LIDER Seminar Series. - Economics & Business Department - University of La Rioja (Spain), November 2024
- Mirian Andrés Seminar - Mathematics & Computation Dept. - University of La Rioja (Spain), November 2024
- Generative AI in Finance - John Molson School of Business - Concordia University (Canada), October 2024
- CEMFI Banking & Finance Seminar Series - Madrid (Spain), October 2024
- XXXI Finance Forum - Asociación Española de Finanzas (AEFIN) - Tenerife (Spain), July 2024

## COURSES ATTENDED

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- Econometrics of Micro and Macro Interactions (August 2025, CEMFI Summer School)
- Using Textual Data in Empirical Monetary Economics (August 2025, CEMFI Summer School)
- SoFiE Summer School: Machine Learning in Finance (August 2025, Yale School of Management)
- São Paulo School of Advanced Science on High Dimensional Modelling (April 2025, FGV EESP)
- Machine Learning in Finance (September 2024, CEMFI Summer School)
- Data Science for Economics (September 2024, CEMFI Summer School)
- DSGE and Time-Series Models for Macroeconomic and Policy Analysis (August 2024, CEMFI Summer School)

## AWARDS & HONORS

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- Best Third Year paper award (September 2025, CEMFI)
- Extraordinary Award to the Best Student. (May 2023, U. La Rioja)
- Award for Academic Achievement (April 2023, CCAA La Rioja).
- Social Council Award of the University of La Rioja, 15th Edition, Student category. (February 2023, U. La Rioja)
- Award to the Best Academic Record (November 2022, U. La Rioja)
- Award to the Best Bachelor's Thesis. (November 2022, U. La Rioja)
- 3rd Prize at XII G9 National University Debate League. (March 2022, G9 University Group)
- 2nd Prize at XI G9 National University Debate League. (April 2019, G9 University Group)
- 2nd Best EBAU Grade of La Rioja, out of 1201 students (June 2018)
- 1st Prize in Piano at the “XXVIII Certamen de Interpretación Musical Fermín Gurbino” (May 2013)
- 2nd Prize in Piano at the “XXVII Certamen de Interpretación Musical Fermín Gurbino” (May 2012)

## SKILLS

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- **Programming Languages:** Python, R, MATLAB, Julia
- **Software and Tools:** L<sup>A</sup>T<sub>E</sub>X, Quarto, Git
- **Languages:** Spanish (Native), English (C2), French (B2)

## NON ACADEMIC HOBBIES

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Piano, Jazz, Swimming, Surfing, Surfskating, Calisthenics, Boxing, Running