

Andrés Riveros Valdevenito

📍 New York, NY, USA ✉ ar4151@columbia.edu 📞 +1 (718) 564 5671 🔗 andresriverosv.github.io
in andres-riveros-valdevenito 🌐 Andrés Riveros Valdevenito 📄 Andrés Riveros Valdevenito

Education

PhD	Columbia University , PhD in Statistics. <ul style="list-style-type: none">Co-advised by Professor Marcel Nutz & Professor Philip Protter.	Sep 2020 - Expected May 2026
M Phil	Columbia University , Master of Philosophy in Statistics. <ul style="list-style-type: none">As part of the PhD program.	Sep 2020 - May 2024
MA	Columbia University , Master of Arts in Statistics. <ul style="list-style-type: none">As part of the PhD program.	Sep 2020 - Feb 2023
MS	Facultad de Ciencias Físicas y Matemáticas (FCFM), Universidad de Chile , Master of Engineering Sciences, minor in Applied Mathematics. <ul style="list-style-type: none">With Maximum Distinction.Advised by Professor Jaime San Martín.	Mar 2014 - Jun 2020
Prof. Deg.	Facultad de Ciencias Físicas y Matemáticas (FCFM), Universidad de Chile , Mathematical Engineer. <ul style="list-style-type: none">With Maximum Distinction.	Mar 2014 - Jun 2020
BS	Facultad de Ciencias Físicas y Matemáticas (FCFM), Universidad de Chile , Engineering Sciences in Mathematics. <ul style="list-style-type: none">With Distinction.	Mar 2014 - Dec 2018

Teaching

Teaching Assistant at Columbia University :	Sep 2020 - Present
<ul style="list-style-type: none">Stochastic Methods in Finance STAT GR4265 (Fall 2025),Probability Qualifying Exam Review Session Teacher (Summer 2023, 2024, 2025),PhD Probability II STAT GR6302 (Spring 2024, Spring 2025, Spring 2026),PhD Probability I STAT GR6301 (Fall 2023, Fall 2024),Core Competency Exam Review Session Teacher (Spring 2024),Probability STAT S4203/W5203 (Summer 2023),Introduction to Statistics with Calculus STAT S1201/W1201 (Summer 2022, Spring 2023),Linear Regression Models STAT S4205/S5205 (Fall 2022),Introduction to Statistics STAT W1101 (Spring 2022, Fall & Spring 2021),Introduction to Statistical Reasoning STAT W1001 (Summer 2021, Fall 2020).	
Teaching Assistant at Universidad de Chile, FCFM:	Mar 2014 - Jun 2020
<ul style="list-style-type: none">Supervisor of Entire Core Courses of Mathematics (2019,2020,2021),Stochastic Calculus MA5402 (Spring 2018, 2019),Markov Processes MA4401 (Fall 2018),Introduction to Calculus MA1001 (Fall 2017),Linear Algebra MA1102 (Spring 2016): Grader & Test Supervisor,Introduction to Calculus MA1001 (Fall 2016): Grader & Test Supervisor.	



Honours & Awards

- Columbia University:** Sep 2020
- Dean's Fellow, Graduate School of Arts & Sciences.
- ANID (CONICYT):** Mar 2019
- Excellence Scholarship for National Science Masters Degree Students, Chile.

Experience

- Dept. of Applied Mathematics, Universidad de Granada,** Visiting Researcher. Granada, Spain
Jun 2025
- Invited by Professor Alejandro Gárriz.
 - Ongoing project related to optimal transport theory.
- Center of Mathematical Modelling, Universidad de Chile,** Research Intern. Santiago, Chile
Jan 2019
- Under guidance of Professor Joaquín Fontbona.
 - Research review of state-of-the-art HMC methods.
- Superintendency of Banks and Financial Institutions (SBIF, now Financial Market Commission, CMF),** Analytics Intern. Santiago, Chile
Jan 2018
- Under Patricio Jaramillo, director of the area of modelling and methodology.
- Assarlab, Faculty of Medicine, Universidad de Chile,** Research Intern. Santiago, Chile
Jan 2017
- Under professor Rodrigo Assar.
 - Created algorithms based on previous research to analyze the learning process of fish.

Publications

- Linear Convergence of Gradient Descent for Quadratically Regularized Optimal Transport.** 2025+
- A. González-Sanz, M. Nutz, **A. Riveros Valdevenito**,
Preprint, [arXiv:2509.08547](https://arxiv.org/abs/2509.08547) .
- Monotonicity in Quadratically Regularized Linear Programs.** 2025
- A. González-Sanz, M. Nutz, **A. Riveros Valdevenito**,
SIAM Journal on Optimization, Vol 35, N°2, pp 1419-1437, [arXiv:2408.07871](https://arxiv.org/abs/2408.07871) .
- Markov Jump Times and their Cox Construction.** 2024
- P. Protter, **A. Riveros Valdevenito**,
Annals of Operations Research, [arXiv:2310.07003](https://arxiv.org/abs/2310.07003) .
- On the Guyon-Lekeufack Volatility Model.** 2024
- M. Nutz, **A. Riveros Valdevenito**,
Finance & Stochastics, Vol 28, N°4, pp 1203-1223, [arXiv:2307.01319](https://arxiv.org/abs/2307.01319) .
- Propiedad de Martingala, Volatilidad Estocástica & Burbujas Financieras** 2020
- A. Riveros Valdevenito**,
Master's Thesis, advised by professor Jaime San Martín, available at [repositorio.uchile](https://repositorio.uchile.cl/) .

Invited & Contributing Talks

- *IV Workshop on Stochastic Analysis and Optimization, applied to economics, finance, energy and insurance*, Puerto Natales, Chile, December 2025.
- *9th Eastern Conference in Mathematical Finance* (Poster), CMU, October 2025.

- *Optimal Transport Reading Group*, CMU, October 2025.
- *Probability Seminar*, FCFM, Universidad de Chile, August 2025.
- *Young Researchers Seminar*, Universidad de Granada, June 2025.
- *Minghui Conference*, Columbia University, April 2025.
- *Statistics and Optimal Transport Workshop (Poster)*, Columbia University, March 2025.
- *Statistics Student Seminar*, Columbia University, January 2025.
- *23rd Northeastern Probability Seminar*, Columbia University, November 2024.
- *Minghui Conference*, Columbia University, April 2024.
- *22nd Northeastern Probability Seminar*, NYU, November 2023.
- *Minghui Conference*, Columbia University, April 2023.
- *Oxford Statistics Student Seminar*, June 2020.

Referee

- Finance & Stochastics.

Technologies & Skills

Basic Programming: Matlab, SciLab, Python, R, Java, Unix, SQL, Visual Basic, Latex, MS Office.

Mathematical Programs: AMPL, BOCOP, FreeFem, STATA, Stan.

Languages: Fluent in English and Spanish. Basic French.