TOMAS ESPAÑA

Double Degree MSc Student in Applied Mathematics/Quantitative Finance

tomas.espana@student-cs.fr | GitHub | Website

EXPERIENCE

Scuola Normale Superiore of Pisa *Pisa, Italy*
Research Intern *May 2025 – Present*
- Topics: Reinforcement Learning for Optimal Execution
- Supervisors: Yadh Hafsi, Edoardo Vittori, Fabrizio Lillo

EconophysiX - CFM Chair of Econophysics & Complex Systems at Ecole Polytechnique *Paris, France*
Research Intern *Jan. 2024 – July 2024*
- Topics: High-dimensional Statistics, Random Matrix Theory, Portfolio Optimization
- Supervisors: Victor Le Coz, Matteo Smerlak, Jean-Philippe Bouchaud

CFM - Capital Fund Management *Paris, France*
Quantitative Research Intern *July 2023 – Dec. 2023*
- Topics: Market Latency (Queueing Theory & Optimization) and Market Microstructure for the Execution Strategies team
- Coded a latency simulator of the CFM order pipeline to improve execution speed/profitability

CentraleSupélec - Université Paris-Saclay *Paris, France*
Math Teaching Assistant *Sept. 2022 – Feb. 2023*
- Taught Measure Theory and Partial Differential Equations to last year BSc students

EDUCATION

M2MO - Université Paris Cité *Paris, France*
MSc in Mathematics: Probability, Finance & Data Science *Sept. 2024 – Expected July 2025*
- One of the top-ranking MSc in Probability and Finance (ex DEA Laure Elie). Double degree with CentraleSupélec.

CentraleSupélec - Université Paris-Saclay *Paris, France*
BSc and MSc of Science and Engineering - French Engineering "Grande Ecole" *Sept. 2021 – Expected July 2025*
- Applied Mathematics

PUBLICATIONS

Pre-prints:

- T. Espana, V. Le Coz, M. Smerlak (2024) *Kendall Correlation Coefficients for Portfolio Optimization*.
  Submitted to *Quantitative Finance* journal.
- P. Bousseyroux, T. Espana, M. Smerlak. (2025) *Another Marčenko-Pastur for Kendall's Tau*.

CONFERENCES

- Poster Presentation. *Random Tensors and Related Topics*, Institut Henri Poincaré, Paris, October 2024.
- Poster Presentation. *Brunel-Bielefeld Workshop on Random Matrix Theory and Applications*, London, December 2024.
- Poster Presentation. *18th Financial Risks International Forum*, Institut Louis Bachelier, Paris, March 2025.