

ÁLVARO RIBOT

aribotbarrado@g.harvard.edu
alvaro-ribot.github.io/website/
Cambridge, MA

Education

2023–28	Harvard University Ph.D. in Applied Mathematics Advisor: Anna Seigal
2018–23	Polytechnic University of Catalonia - UPC B.Sc. in Mathematics
2018–23	Polytechnic University of Catalonia - UPC B.Sc. in Data Science and Engineering

Research Experience

09/2022–05/2023	Massachusetts Institute of Technology Visiting Student. Advisor: Caroline Uhler • Developed connections between causal models and matrix completion
06/2021–10/2021	ICMAT – Institute of Mathematical Sciences Research Assistant. Advisor: Maria Medina de la Torre • Studied equivalence of solutions for non-linear elliptic PDEs
07/2021–09/2021	Barcelona Supercomputing Center Research Intern. Advisor: Carlos Alberto Gomez Gonzalez • Used CNNs for the localization of methane emission sources

Research Interests

Applied algebra, tensor decomposition, algebraic statistics, causality, machine learning theory

Awards & Honors

2024–26	"La Caixa" Foundation Graduate Fellowship
2024	Best Poster Prize, MEGA Conference
2024	Nova 111 Student List
2023–25	Real Colegio Complutense at Harvard University Graduate Fellowship
2022–23	MOBINT-MIF Study Abroad Scholarship
2021	Grant program Severo-Ochoa - ICMAT: Introduction to Research
2018–23	CFIS-UPC Tuition Scholarship
2018	Baccalaureate with Honors (highest GPA)
2016,'18	Mathematical Kangaroo, 2nd place

Publications

1. Ribot, Á., Squires, C. & Uhler, C. *Causal Imputation for Counterfactual SCMs: Bridging Graphs and Latent Factor Models* in Proceedings of the Third Conference on Causal Learning and Reasoning. 236 (PMLR, 2024), 1141–1175.

Presentations

07/2024 Poster, Effective Methods in Algebraic Geometry (MEGA), Leipzig, Germany.
04/2024 Poster, 3rd conference on Causal Learning and Reasoning (CLeaR), UCLA

Teaching

2022 Undergraduate Student Instructor, Fourier Analysis UPC
2021-22 Teaching Assistant, Freshman courses (Calculus and Algebra) UPC

Other Experience

07-09/2020 **HP**
Data Science Intern. Barcelona, Spain.
• Analyzed Covid-19 impact on Large Format Printing.
• Developed clustering models and Time Series forecasts in Python.