ROCCO DI TELLA

roccoditella1@gmail.com

EDUCATION

Universidad de Buenos Aires — *2020 - 2024*
Licenciatura in Data Science (B.S. + M.Sc. equivalent) — *GPA: 9.0/10*
Thesis Advisors: Enzo Tagliazucchi, Gabriel Kreiman
Thesis project: Convolutional Nerual Networks as models of human visual attention.

RESEARCH EXPERIENCE

Visiting Student Fellowship — AstroAI, Harvard Center for Astrophysics — *jun - aug, 2025*
Advisors: Cecilia Garraffo, Juan Martínez Galarza
Flow Matching with Transformer architectures to generate multi-modal posteriors for images and X-ray spectra from Galaxies.

Research Assistant — Applied Artificial Intelligence Lab, UBA — *2025 - present*
Advisor: Luciana Ferrer
My work is on automatic detection of Hallucinations in Generative Language Models using grey-box calibration methods and white-box probing.

Research Assistant — Kreiman Lab, Harvard Medical School — *jan 2024 - march 2025*
Advisor: Gabriel Kreiman
Followed work done during my MSc. thesis to study computational, cognitive and neuroscientific models of human visual attention.

Research Assistant — Center for A.I. and Neuroscience, UTDT — *2021 - 2022*
Developed Bayesian methods for efficient experiment design.

TEACHING EXPERIENCE

Teaching Fellow — Universidad de San Andres (UdeSA) — *2025 - present*
TF for an advanced undergraduate course on Machine Learning.

Teaching Assistant — Universidad de Buenos Aires (UBA) — *2024*
TA for graduate courses on Bayesian and Causal Inference and undergraduate on Statistics.

Teaching Assistant — Universidad Torcuato Di Tella (UTDT) — *2022 and 2024*
TA for undergraduate courses on Statistics and Cognitive Science.

INDUSTRY EXPERIENCE

Data Scientist — GRIDX Biotech Venture Capital — *2021 - 2022*
Started a data consulting team which grew into an independent company.

Data Scientist — El Gato y La Caja — *2017 - 2021*
Engaged in data storytelling aimed at a general audience and designed experiments for cognitive science research. Click here to see showcased work.

AWARDS

Visiting Student Fellowship — Smithsonian Astrophysical Observatory — *2025*
Fellowship award as a short-term research scholar at AstroAI (Harvard & Smithsonian). It covers a Stipend, Housing and Relocation to Boston for a 10 week duration.

AI Safety Scholarship — AISAR (AI Safety Argentina) — *2025*
Scholarship that includes a stipend for 6 months of research and $3000 of compute.

ACADEMIC PUBLICATIONS

- "AI Boom: The New Dawn or Dusk for Visual Search" (first author, in progress).

- "Fast Nonparametric Bayesian Framework for On-the-Fly Adaptive Design Optimization" (co-author, in progress).

- "Optimum Integration Procedure for Connectionist and Dynamic Field Equations", *Frontiers in Neurorobotics* (co-author).

- "Lifetime Use of Psychedelics is Associated With Better Mental Health Indicators During the COVID-19 Pandemic", *Journal of Psychedelic Studies* (co-author).

CONFERENCE PRESENTATIONS

- "Finding Waldo", Simposio Científico de Inteligencia Artificial y Aplicaciones, 2024 (poster).

- "A Bayesian Look", Bayes Plurinacional Workshop, 2024 (short talk and poster).

- "Fast Nonparametric Bayesian Framework for On-the-Fly Adaptive Design Optimization", Bayes Plurinacional Workshop, 2023 (poster).

- "A Massive Experiment on Choice Blindness", Sociedad Argentina de Neurociencia, 2017 (poster).

TECHNICAL SKILLS

- Technical knowledge: Deep Learning, Computer Vision, Generative Language Models, Interpretability, Causal Inference, Bayesian Statistics, Probabilistic Programming.

- Programming languages: Python, R, Julia

- Developer Tools: Git, AWS, linux, nvim