

Andrea Dapor

PHD · THEORETICAL PHYSICS · DATA SCIENCE

tel +34634807244

email andrea.dapor@gmail.com

website andreadapor.com

linkedin [adapor](https://www.linkedin.com/in/adapor)

Experience

Oct. 2022 - Today: Senior Data Scientist, Ebury (Spain) - Identify opportunities for substantial improvement, estimate results, and develop ML solutions to achieve them. I worked on projects in several verticals (CX, FO, Ops), as individual contributor or in collaboration with analysts and engineers, regularly communicating with C-suite. My current focus is on cross-enterprise integration of LLMs.

* Achieved a 15% improvement in client onboarding time, by deploying a LLM-based algorithm that transcribes FO calls with prospects and extracts KYC information.

* Improved employee productivity by developing a LLM-based chatbot that can answer cross-enterprise internal questions, as well as analyze uploaded texts and urls. It currently averages over 200 daily users.

* Helped Sales optimizing lead conversion (and generating a theoretical uptake of 180%), via an XGBoost classifier that predicts the probability that a lead is interested in Ebury's products.

* Brought participation rate in a Dynamic Pricing initiative from under 50% to above 85%, by carrying out an A/B experiment, and providing executives with a dashboard to monitor success and adoption.

Oct. 2020 - Oct. 2022: Data Scientist, Inverence (Spain) - Analyze data and program algorithms for decision-making purposes, working in projects for several clients from various industries.

* Reduced churn by 22% for a major Spanish occupational hazard insurance company, by identifying customers at risk (with a Bayesian logit model) and designing counter-actions with the stakeholder.

* Delivered actionable market insight to a German mobile network operator, by determining the drivers or price of data plans for the client and its competitors, and forecasting how they change over time.

* Modeled the progression of infection during the Covid19 pandemics, for the Carlos III Health Institute. The model was used to simulate the effects of different vaccination strategies.

* Identified the most valuable clients for a Spanish hospital group. This was achieved by forecasting the future profits produced by each client and performing a NPV calculation.

Oct. 2018 - Oct. 2020: Postdoc, Louisiana State University (USA) - Carry out research in quantum cosmology. Execution of simulations of the early universe. Scientific communication and outreach.

* Published several papers in scientific journals ([details](#)). Invited speaker at international conferences.

* Had a model named after me and a colleague, for the central contributions we gave in its development.

Oct. 2015 - Oct. 2018: Postdoc, University of Erlangen-Nuremberg (Germany) - Perform research in quantum gravity, modeling the microscopic structure of spacetime. Mentoring and teaching.

* Teaching assistant of several university courses, ranging from quantum mechanics to general relativity.

* Mentored a student for his Master Degree, from which he graduated with top honors.

Education

Oct. 2011 - Oct. 2015: PhD in Theoretical Physics, University of Warsaw (Poland)

Skills

Data Science and Dev

python (PyCharm, Jupyter)
databases (SQL, BigQuery)
cloud computing (GCP)
deployment (Docker, Cloud Run)
visualization (Data Studio, streamlit)

ML Algos and Modeling

LLMs (embeddings, RAG, openai)
time series (ARIMA, State Space)
Bayesian estimations (MCMC)
standard algos (XGBoost, PCA, ...)
probability, statistics, linear algebra

Consulting

curiosity, fast learning, versatility
problem-solving, solution design
business focus, strategic thinking
teamwork, effective communication
dealing with business stakeholders

Fintech and Other Skills

FX rate forecasting (Monte Carlo)
fintech products (forwards, options)
financials (BS, P&L), valuation (NPV)
pricing, risk modeling
English, Spanish, Italian