

Gaston Mazzei, MSc

Data Science, Software Engineering

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📍 BsAs, Argentina

Highly motivated by the never-ending task of closing the gap between the state-of-the-art modelling & problem-solving that occurs in Academic Institutions and the daily routines that make modern societies such comfortable places to live in.

Whereas if it is trying to convince with examples to some old-fashioned company the benefits of automation and “smart” numerical methods, or being part of a great team in a technology-competitive environment, my professional objectives will be on average fulfilled. The preference is for the second case, as it is where the learning opportunities are the most.

Education

Applied AI Internship, ICAS, UNSAM, Arg.

3/2020- 12/2020

ICAS is the institute center for advanced studies, devoted to artificial intelligence applied to physics.

Master of Science (M.Sc.), Dep. of Physics¹, UBA, Arg.

2015-2020

UBA is the Buenos Aires University, which ranks 66 in the QS worldwide college index.

Publications

Poster presenter([link](#)), 22nd Giambiagi Winter School: Artificial intelligence and physics

nov-2020

Shown 8 open-source numerical-simulations of physical problems solved with machine learning. Topics included: game theory, group theory, nonlinear-equations and detection of Higgs processes.

Best Undergraduate Research, ([vol 6, p588](#))ASAMACI 2017, Arg.

May 2017

ASAMACI is the Argentinian Association of Applied Mathematics, where the results of numerically integrating the Black Scholes stochastic PDE with non-differentiable transaction costs were presented.

Private sector

Data Analysis Consultant, Kosten Aike Hotel (4 stars ****), Calafate, Arg.

nov 2018- nov 2019

Metrics were qualitatively measured for a traditionally data-blind company. Service consisted in building a database with monthly updates for a year and the subsequent elaboration of two reports: the first one measured the carbon-footprint, while the second one proposed a simple new metric built with unsupervised learning to assist the executive decisions ([work-ref](#), [report_public-version](#)).

Courses

Machine Learning, UNSAM (Saint Martin National University), arg.

aug-2020

A Bayesian approach to numerical methods and the connection with (un)supervised algorithms ([ref](#)).

Quantitative analysis (finance), Department of Mathematics, UBA, arg.

aug-2016

Stochastic calculus and general equilibrium conditions that lead to the building blocks of quantitative analysis in finance ([ref](#))

Languages

Spanish: Native, **English**: Full professional proficiency (IELTS UKVI certified²)

Open source portfolio

Neural networks applied to physical problems([poster & codes](#)), a publicly-available neural network online([site](#)), a website that uses bayesian statistics to expand on the Harvard accusation of Argentina's covid-database being corrupted([site](#))³([code](#)), a software to constrain cpu-intensive python processes([code](#)), a 100-person experiment that measured the human ability to detect music and compared it against a random forest algorithm ([article](#)) ([code](#)), and a software to convert the movement of objects into music via a tracking algorithm([code](#)) ([example](#)) are among other codes made public in [my github](#). An index of them all can be found in [my website](#).

¹ The thesis will be publicly-available after its defense, scheduled for Feb-2-2021

² results due Dec-15-2020

³ Please allow a minute for it to load; it's currently on a slow server