

MARTÍN ARAMAYO

Autonomous City of Buenos Aires, Buenos Aires, Argentina

My blogs: in English [blog/Martín](#), in Spanish [blog/Martín/es](#), (each of the links offers different content).

Completed education

Instituto Balseiro, Full Scholarship, National Atomic Energy Commission

Jan. 2018 – Dec. 2021

Master in Statistical Physics (M.Sc.): Applied Simulations and Machine Learning | Physics B.Sc. | Bariloche, Río Negro, Argentina

Experience

Mercado Libre

Dec. 2022 – Oct. 2023 (11 meses)

Data Scientist

Autonomous City of Buenos Aires, Buenos Aires, Argentina

- Fully implemented 3 bussiness initiatives for marketplace moderation.
- Refractor/update of Mod Dev Team Tableau Dashboards (800+ visits) including: SQL jobs, redone metrics and UI/UX
- Implement an image enhancement model to be applied to 3M+ pictures on the marketplace.
- Participation in the internal OpenAI ChatGPT 4 hackathon building a text summarizer tool
- Tech: OpenAI, ChatGPT, Tableau, Bash, AWS, Big Query, Google cloud, GAN models, Pandas, Go, SQL, Computer Vision, Python, modelos & BI tools in-house.

Intellignos, Havas

Mar. 2022 – Nov. 2022 (10 months)

Data Scientist

Autonomous City of Buenos Aires, Buenos Aires, Argentina

- Production of more efficient metrics for model. Converting a costly $O(ne^n)$ metric calculation to a $O(n)$ metric.
- ETL, analysis, support, documentation and modelling for global clients. Merging of two clients ETLs into one.
- Management, ownership, automatization, config file design and production of the ETL for two products of a US client.
- Tech: Bash, DataBricks, StreamSets, BigQuery, Dataproc, PySpark, Azure, Python, in-house models & BI tools.

UNICEF, ONG

Jun. 2020 – Feb. 2022 (1 year 9 months)

Data Scientist trainee

Bariloche, Río Negro, Argentina

- Analysis of GIS data and microcensus data for a demographical estimation project.
- Binary classification of occupation state with machine learning.
- Tech: Scikit-learn, Numpy, Pandas, SPSS datasets, Scipy, SQL.

CNEA, Centro Atómico de Bariloche

Jun. 2018 – Jan. 2022 (3 year 6 month)

ML trainee — Scholarship Holder — B. Sc. & M. Sc. in statistical Physics

Bariloche, Río Negro, Argentina

- Ground-up implementation of agent-based demographic simulation with 300 000+ agents. Data pipeline includes: automatic config & log files, post-execution analysis, testing & benchmarking.
- Mathematical modelling courses: dynamical systems, stochastic models, game theory, technology & healthcare models.
- AI: Machine Learning, Deep Learning, LSTM, NLP, image processing, encoding, feature engineering & clustering.
- Data handling: Preprocessing field data, simulation data production & analysis, data mining from multiple runs.
- Software development: Python for data analysis. Computational experience in physics, biology & healthcare projects. CUDA oriented to simulations. Basic data structures in C; trees, stacks, list.
- Frequent presentations of project insights with stakeholders.
- Simulating the control system for the orientation and course-correction of a modelled satellite through a Kalman filter.
- Courses on Medical imaging: OpenCV, ImageJ, Matlab and Python.
- Data-driven projects requiring statistical background.
- Instances of public speaking involving the communication of experimental results and technical knowledge acquired.

Projects & skills

Demographic agent-based simulation: Reproduction and resources | *Python, Bash, Pandas, Matplotlib* **April 2021**

- OOP prototype in Python & Final implementation with Pandas reducing in half execution times.
- Public presentations with results and visualizations showing reproduction of classical models in population dynamics.

Demographic estimation | *Sklearn, Keras, Matplotlib, Python*

August 2020

- Data exploration and data analysis at the feature engineering stage.
- Implementation of binary classifiers to distinguish between habitated and unhabitated households from satellital data.
- Estimation of subpopulations from an estimated distribution of habitants for each household.
- Small dataset estimation, knowing only satellital information and microcensus data.

Programming Languages : Python, C, BASH, SQL

Development tools : Regex, Jupyter, IPython, git, postgresSQL, BigQuery, Dataproc, Streamsets, PySpark, REST APIS

Technologies/Frameworks : Linux, Docker, Pandas, Sci-kit learn, Keras, Numpy, Matplotlib

Documentation : Latex, Markdown, pandoc, Notion, Joplin, Mermaid, Hugo, Inkscape, VS code

Languages : English (ESOL B2), Spanish (Native)