Diego M. Arribas

Experience

Industry

2021–Present **Senior Data Scientist**, *Nubank*, Remote.

- Developing a machine learning model and framework to transform Lending's policy design.
- Developed data processing pipelines (ETL) using Spark with Scala.
- Led the development of Lending's machine learning model for loan risk, impacting millions of customers and deciding on billions in amount lent while proposing innovative modeling methods.

Research

2016–2021 **PhD student**, *IBioBA - Max Planck Partner Institute*, Buenos Aires, Argentina.

- Developed and implemented Bayesian probabilistic models in Python to study neural coding.

2020 **Visiting Scholar**, *Stony Brook University*, New York, USA.

- Developed a framework and a PyTorch library to improve samples generated by autoregressive models.
- Developed a Bayesian method to extract underlying timescales of neural data.

Skills

Programming	Python | Scala | Bash | Git | Matlab
Data Science	SQL | Spark | AWS | Docker | Kafka | Kubeflow | Scikit-learn | LightGBM/XGBoost | PyTorch | Keras | SHAP | Pandas | NumPy | Fklearn | NLTK | SpaCy | LLMs | LangChain
Mathematical modeling	Machine Learning | Time Series Modeling | Bayesian Modeling | Causal Inference | Statistics | Deep Learning | Natural Language Processing | Dynamical Systems

Education

2016–2021 **PhD in Computational Neuroscience**, *University of Buenos Aires*, Argentina.

2009–2016 **MSc in Physics**, *University of Buenos Aires*, Argentina, *GPA – 9.62/10*.

Schools and courses

Aug2021 Oxford Machine Learning Summer School. Online.

Nov2019 Khipu. Latin American Meeting In Artificial Intelligence. Montevideo, Uruguay

Aug2017 CAJAL Course in Computational Neuroscience. Champalimaud Centre for the Unknown, Lisbon, Portugal

Jun/Jul2017 Neural Systems & Behavior. Marine Biological Laboratories, Woods Hole, USA

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Publications

2023 **D M Arribas**, A Marin-Burgin and L G Morelli. Adult-born granule cells improve stimulus encoding and discrimination in the dentate gyrus. eLife.

2022 D Neophytou*, **D M Arribas***, R Levy, I M Park and H V Oviedo. Differences in temporal processing speeds between the right and left auditory cortex reflect the strength of recurrent synaptic connectivity. PLOS biology.

2020 **D M Arribas**, Y Zhao and I M Park. Rescuing neural spike train models from bad MLE. Advances in Neural Information Processing Systems 33 (NeurIPS 2020).

Teaching experience

Jul2021 **Teaching Assistant**, *Neuromatch Academy*, Remote.
Taught an introductory course in Computational Neuroscience for international scientists.

2018–2020 **Data Science Mentor**, *Acámica*, Buenos Aires, Argentina.
Taught an introductory course in Data Science and Machine Learning for professionals.

2013–2018 **Physics and math Teaching Assistant**, *University of Buenos Aires and ITBA*, Buenos Aires, Argentina.

Languages

English **Proficient**

Spanish **Native**

Portuguese **Intermediate**

German **Basic**