Magalí Giaroli

mpgiaroli@gmail.com

♀ Argentina

mgiaroli.github.io

Mathematician with several years of experience in academic research and university teaching. Currently interested in data science and machine learning, looking to apply analytical skills to solve real-world data problems.

Education

Universidad de Buenos Aires

Ph.D., Mathematical Sciences

Licenciatura, Mathematical Sciences

Bs. As., Argentina

Sep 2019 Mar 2014

2014-2019

Experience

Research

IMAS - CONICET

Bs. As., Argentina

Doctoral fellow

• Researched in algebraic geometry applied to biology. Developed algebraic and geometric tools for the study of multistationarity in biochemical reaction networks and positive solutions of sparse polynomial systems.

- Authored 4 scientific articles published in high-impact peer-reviewed journals. Work done in close collaboration with senior and young researchers.
- Presented results at national and international conferences. Attended several international workshops and congresses.

Teaching

Dto. de Ciencias Exactas, CBC, UBA

Bs. As., Argentina

Graduate teaching assistant (from 2016), Undergraduate teaching assistant

2011–2020

Dto. de Matemática, FCEN, UBA

Bs. As., Argentina

Graduate teaching assistant (from 2015), Undergraduate teaching assistant

2011-2019

- Taught undergraduate courses of 30-100 students, giving lectures and consultation classes.
- Planned lectures and practice exercise guides. Designed mid-term exam problems and graded exams.

Skills

Programming: Python, Octave, SQL

Data Science: Pandas, Numpy, Scikit-learn, Data visualization: Matplotlib, Seaborn

Others: Latex, Streamlit, Git, OS: Linux, Windows

Projects

News classifier: Machine learning classifier of Argentine news by category. Includes the collection of news, text cleaning, data analysis and data visualization, training of distinct supervised classification models, model selection (+85% accuracy) and implementation of an interactive web application in streamlit. •

Board games recommender: Content-based recommender for Board Game Arena games. Includes data collection, exploratory data analysis, creation of the recommender, and its implementation in streamlit. •

Others

Volunteer Experience

Mateclubes - Olimpíada Matemática Argentina

Argentina

Member of the Olympic Committee

2008-present

Includes elaboration of tests for all instances and act as a jury. Co-authored two competition problem books.

Multicultural Center Gloria

Jyväskylä, Finland

Language guide and organizer of the Spanish Learning Group and Language café

2020-2021

Relevant courses

- Machine Learning Stanford University, Coursera
- Data Analysis with Python freeCodeCamp
- Scientific Computing with Python freeCodeCamp
- SQL for Data Science edX

Languages

• Spanish: Native • English: Fluent • Finnish: Pre Intermediate