

# Magalí Giaroli

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📍 Argentina

🌐 [mgiaroli.github.io](https://github.com/mgiaroli)

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*

## Experience

### Research

#### IMAS - CONICET

*Bs. As., Argentina*  
*2014–2019*

*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 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*  
*2011–2020*

*Graduate teaching assistant (from 2016), Undergraduate teaching assistant*

#### Dto. de Matemática, FCEN, UBA

*Bs. As., Argentina*  
*2011–2019*

*Graduate teaching assistant (from 2015), Undergraduate teaching assistant*

- Taught undergraduate courses of 30-100 students, giving lectures and consultation classes.
- Planned lectures and 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 - Olimpiada 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
- Scientific Computing with Python - freeCodeCamp
- Data Analysis with Python - freeCodeCamp
- SQL for Data Science - edX

## Languages

- **Spanish:** Native
- **English:** Fluent
- **Finnish:** Pre Intermediate