

## INFORMAZIONI PERSONALI

**Mariagrazia Cairo**

## POSIZIONE RICOPERTA

**PhD student in methodological statistics  
University of Rome, Sapienza**ESPERIENZA  
PROFESSIONALE

From November 2023

**PhD student in methodological statistics  
University of Rome, Sapienza  
(From November 2023)**

## ISTRUZIONE E FORMAZIONE

October 2020 - January 2023

**Master Degree in Statistical Sciences  
curriculum Data Analyst**

University of Rome, Sapienza

Grade: 110/110 cum laude

Supervisor: Prof. Umberto Ferraro Petrillo

Title of the thesis: "A distributed approach to normalization of large-scale single-cell RNA-seq data."

The project of the thesis involved the conception, development and testing in Java using Apache Spark of a distributed normalisation algorithm based on the PsiNorm normalisation method implemented by M. Borella, G. Martello et al., in PsiNorm: a scalable normalisation for single-cell RNA-seq data.

September 2017 - July 2020

**Bachelor Degree in Mathematics**

University of Salento

Grade: 110/110 cum laude

Supervisor: Prof. Anna Maria Cherubini

Title of the thesis: "The mathematics of contagion: mathematical models applied to an infection."

The project of the thesis involved a comparison of the best-known models in the literature for studying and predicting the development of infectious diseases. The study of models was accompanied by a graphical study with the aid of Matlab.

September 2012 - June 2017

**Scientific Diploma**

Liceo scientifico Cosimo De Giorgi (LE)

Grade: 100/100 e lode

## COMPETENZE PERSONALI

Lingua madre

Italiano

Altre lingue	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	B2	B2	B2	B2	B2
First (B2)					

Livelli: A1/A2: Utente base - B1/B2: Utente intermedio - C1/C2: Utente avanzato  
[Quadro Comune Europeo di Riferimento delle Lingue](#)

Competenze digitali	AUTOVALUTAZIONE				
	Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
	Avanzato	Avanzato	Avanzato	Avanzato	Avanzato

Livelli: Utente base - Utente intermedio - Utente avanzato  
[Competenze digitali - Scheda per l'autovalutazione](#)

## COMPUTERSKILLS

- Microsoft Office Package.
- C.
- Java.
- R.
- IBM ILOG CPLEX Optimization Studio.
- AMPL.
- Wolfram Mathematica.
- Matlab
- SQL.
- Apache Spark.
- .NET e C#.
- Latex.

Patente di guida B

## PARTICIPATION IN EXHIBITIONS

### Participation in exhibitions

- Recent Advances in Multi-Objective Optimization (RAMOO), Rome, September 14, 2023.
- StaTalk 2023, Rome, September 15, 2023.
- 8th AIRO Young workshop,
- “Emerging technologies for decision support systems and innovative” optimization paradigm, Rende, 14-16 February 2024.
- 33rd European Conference on Operational Research (EURO 33rd) Copenhagen, Denmark, June 30 – July 3, 2024.
- ODS2024, INTERNATIONAL CONFERENCE on OPTIMIZATION and DECISION SCIENCE, Badesi - Sardinia (Italy) September 8th - September 12th - 2024
- EURO PhD School on Multiple Criteria Decision Making: Methodologies and Applications to the Sustainable Development Goals 4 November - 15 November 2024.

### Some academic responsibilities

- Collaborator in the organisation of the RAMOO Workshop 2023, Rome, September 14, 2023 organized by Lavinia Amorosi (University of Rome) and Marianna De Santis (University of Florence).
- Organiser of the XI PhD-Day, at University of Rome, Sapienza, Rome, 6 June 2024.
- Tutor for course exercises in Operational Research, University of Rome, Sapienza, February-June 2024.
- Tutor of the master Data Intelligence and Decision Strategies, University of Rome, Sapienza from February 2024.

**Dati personali** Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

La sottoscritta dichiara di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Data  
09/12/2024

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