

# PAOLO DALENA

PhD Student in Applied Data Science & Artificial Intelligence (ADSAI)  
Health Researcher

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## RESEARCH EXPERIENCE

### PhD Student in ADSAI

University of Trieste

📅 Nov 2023 – Present    📍 Trieste, Italy

- Project title: *Development of a prioritization algorithm of pathogenic variants based on public databases of different origins*;
- Supervisors: Giulia Barbati, Pio A. D'Adamo, Massimo Zeviani

### Health Researcher

IRCCS Burlo Garofolo

📅 Jan 2022 – Present    📍 Trieste, Italy

- WHO Collaborating Center for maternal and child health;
- Pediatric clinic & genomics (from Nov 2023);
- Participation in national and international projects as a bio-statistician & data scientist;
- Research topics: maternal and child health, health system research, implementation of WHO recommendations in low and middle-income countries, health data analytics, genomics;
- Supervisor: Marzia Lazzerini, Egidio Barbi (from Nov 2023)

### Internship Master thesis

Institute for Mathematical Biology - Hochschule Mannheim

📅 Apr 2021 – Sep 2021    📍 Mannheim, Germany

- Collaboration for Master thesis *Circular codes, reading frames and error correction in translation* - Erasmus+ program;
- Supervisors: Simone Giannerini, Lutz Strüngmann

### Internship Master student

Bundesbank Research Centre

📅 Feb 2021 – Apr 2021    📍 Frankfurt am Main, Germany

- Undisclosed project on quality assessment of research center's publications;
- Applied techniques: Big Data Analytics, Text Mining

### Internship Bachelor student

Unit of Biostatistics, Epidemiology and Public Health –  
University of Padua

📅 Jan 2019 – Mar 2019    📍 Padua, Italy

- Text mining on complex text sources: tumor marker guidelines. Development of an R package to import text from PDF files;
- Acquired skills and achieved objectives: Data Science with R, understanding of R language, R programming, R Package developing;
- Supervisors: Dario Gregori, Corrado Lanera

## EDUCATION

Second-level Short Specialisation  
Degree in Machine learning and  
big data in precision medicine and  
biomedical research

University of Padua, Italy

📅 Dic 2022 - Oct 2023

### Master degree in Statistics

Alma Mater Studiorum - University of  
Bologna, Italy

📅 Sep 2019 - Oct 2021

- Curriculum Data Science (fully taught in English)
- Grade 110/110 L - Weighted avg 28,78/30
- Thesis title: **Circular codes, reading frames and error correction in translation**
- Supervisor: Simone Giannerini, Lutz Strüngmann

### Bachelor degree in Statistics

Alma Mater Studiorum - University of  
Bologna, Italy

📅 Sep 2016 - Jul 2019

- Curriculum Economics & business
- Grade 110/110 L - Weighted avg 29,15/30
- Thesis title: **Text Mining On Complex Text Sources: Analysis Of The Final Considerations Of The Governor On The Annual Reports Of The Bank Of Italy From 2008 To 2017**
- Supervisors: Ignazio Drudi, Fabrizio Alboni, Corrado Lanera

## PROGRAMMING SKILLS

- R-programming:
  - Data Science
  - Machine Learning
  - Reproducible research - R Markdown, book-down, pkgdown, blogdown
  - Packages developing
  - Data visualisation - ggplot2, plotly
- Version control - Git, Github, GitLab
- HTML, CSS, Javascript (basic level)
- SPSS, Stata, SAS (basic level)

## PUBLICATIONS

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- *Women's suggestions on how to improve the quality of maternal and newborn care during the COVID-19 pandemic in Italy: A co-occurrence network analysis*  
S. Geremia\*, E. Pessa Valente, I. Mariani, P. Dalena, M. Lazzerini  
[Journal of Global Health \(2023\) - open access](#)
- *Implementation of the WHO standards to assess the quality of care for children with acute respiratory infections: findings of a multicenter study (CHOICE) in Italy*  
M. Lazzerini, M. Dagnelut, P. Dalena\*, et al.  
Accepted as a dedicated supplement on BMJ Paediatrics Open (accepted, sent to production, doi: 10.1136/bmjpo-2024-002552)
- *Implementation of the WHO standards to assess the quality of care for children with acute diarrhea: findings of a multicenter study (CHOICE) in Italy*  
M. Lazzerini, P. Dalena\*, I. Sforzi, et al.  
Accepted as a dedicated supplement on BMJ Paediatrics Open (accepted, sent to production, doi: 10.1136/bmjpo-2024-002569)
- *Implementation of the WHO standards to assess the quality of care for children with acute pain in EDs: findings of a multicenter study (CHOICE) in Italy*  
E. Balestra, G. Cozzi, I. Sforzi, et al. (P. Dalena\* 10th aut.)  
Accepted as a dedicated supplement on BMJ Paediatrics Open (accepted, sent to production, doi: 10.1136/bmjpo-2024-002610)
- *Implementation of the WHO standards to assess the quality of pediatric care using service users as source of data: findings of a multicenter study (CHOICE) in Italy*  
S. Bressan, G. Sartor, P. Dalena\*, et al.  
Accepted as a dedicated supplement on BMJ Paediatrics Open (currently under review)
- *Parental stress, depression, anxiety and participation in care in Neonatal Intensive Care Unit: a cross-sectional study in Italy comparing mothers versus fathers*  
J. Bua, P. Dalena\*, I. Mariani, et al.  
Accepted as a dedicated supplement on [BMJ Paediatrics Open \(2024\) - open access](#)
- *Parental stress, depression, anxiety and participation to care in Neonatal Intensive Care Units: results of a prospective study in Italy, Brazil, and Tanzania*  
M. Lazzerini, D. Barcala Coutinho do Amaral Gomez, G. Azzi-monti, et al. (P. Dalena\* 14th aut.)  
Accepted as a dedicated supplement on BMJ Paediatrics Open (accepted, sent to production, doi: 10.1136/bmjpo-2024-002539)
- *A lesson for understanding parents' perspective: perception of quality of care and COVID-19 related fears among users of pediatric health services over the COVID-19 pandemic in 11 facilities in Italy*  
P. Dalena, A. Zago\*, A. Troisi, et al.  
Italian Journal of Pediatrics (currently under review)

## LANGUAGES

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Italian  
English  
French



## CONFERENCES & SCHOOLS

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- 30th International Pediatric Association (IPA) Congress & 60th Annual Conference of the Indian Academy of Pediatrics (IAP)
  - 1 Oral Presentation
  - 3 Poster Presentation18/02/2023 - 22/02/2023  
Gandhinagar, India
- MOnitoring Outbreaks for Disease surveillance in a data science context (MOOD) Summer School 2023
  - Awarded of merit-based scholarship
  - 1st classified hackathon *Predicting the occurrence of ticks in the UK between 2014-2021*21/05/2023 - 27/05/2023  
Split, Croatia
- European Scientific Conference on Applied Infectious Disease Epidemiology 2023  
22/10/2023 - 24/10/2023  
Barcelona, Spain

## PROFESSIONAL ACHIEVEMENTS

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- R package [tastypie](#) available on CRAN 10/02/2021
- PeerJ Enhanced Lifetime Individual Membership, Leanpub Lifetime Reader Membership (hackathon prizes)
- Reviewer for Frontiers (Endocrinology) From Dec 2023
- Tutor for the course Health Data Analytics (UniTS, 2024)

## HOBBIES & INTERESTS

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My hobbies are playing football and climbing.