

PAOLO DALENA

PhD Student in Applied Data Science & Artificial Intelligence @UniTS
Health Researcher @IRRCS Burlo Garofolo

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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*
- Supervisors: 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, bookdown, pkgdown, blogdown
 - Packages developing
 - Data visualisation - ggplot2, plotly
- Version control - Git, Github, GitLab
- HTML, CSS, Javascript (basic level)
- SPSS, Stata, SAS (basic level)

PUBLICATIONS

- *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
doi: 10.7189/jogh.13.06013
[Journal of Global Health \(2023\) - open access](#)
- *Evaluation of the WHO standards to assess quality of care for children with acute respiratory infections: findings of a baseline multicentre assessment (CHOICE) in Italy*
M. Lazzerini, M. Dagnelut, P. Dalena*, et al.
doi: 10.1136/bmjpo-2024-002552
[BMJ Paediatrics Open \(2024\) - open access](#)
- *Implementation of the WHO standards to assess the quality of care for children with acute diarrhoea: findings of a multicentre study (CHOICE) in Italy*
M. Lazzerini, I. Sforzi, I. Liguoro, et al. (P. Dalena* last author)
doi: 10.1136/bmjpo-2024-002569
[BMJ Paediatrics Open \(2024\) - open access](#)
- *Implementation of the WHO standards to assess quality of care for children with acute pain in EDs: findings of a multicentre study (CHOICE) in Italy*
E. Balestra, G. Cozzi, I. Sforzi, et al.
doi: 10.1136/bmjpo-2024-002610
[BMJ Paediatrics Open \(2024\) - open access](#)
- *Implementation of the WHO Standards to assess quality of paediatric care at the facility level using service users' perspective as source of data: a multicentre quality improvement study in Italy*
S. Bressan, G. Sartor, P. Dalena*, et al.
doi: 10.1136/bmjpo-2024-002600
[BMJ Paediatrics Open \(2024\) - open access](#)
- *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.
doi: 10.1136/bmjpo-2023-002429
[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.B.C. do Amaral Gomez, G. Azzimonti, et al.
doi: 10.1136/bmjpo-2024-002539
[BMJ Paediatrics Open \(2024\) - open access](#)
- *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.
doi: 10.1136/bmjpo-2024-002926
[BMJ Paediatrics Open \(2024\) - open access](#)

HOBBIES & INTERESTS

My hobbies are playing football and climbing.

LANGUAGES

Italian
English
French



CONFERENCES

- 30th International Pediatric Association (IPA) Congress & 60th Annual Conference of the Indian Academy of Pediatrics (IAP) 2023
- 1 oral & 3 poster presentations
18/02/2023 - 22/02/2023
Gandhinagar, India
- European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE)
22/10/2023 - 24/10/2023
Barcelona, Spain
- 45th Annual Conference of the International Society for Clinical Biostatistics (ISCB) 2024
- 2 poster presentations
21/07/2024 - 25/07/2024
Thessaloniki, Greece
- 13th International Conference on Complex Networks and their Applications (CNA) 2024
- 1 oral presentation
10/12/2024 - 12/12/2024
Istanbul, Turkey

SCHOOLS

- 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
- Utrecht Summer School 2024 - Advanced Multilevel Analysis
15/07/2024 - 17/07/2024
Utrecht, The Netherlands
- CINECA - High Performance Bioinformatics
04/12/2024 - 06/12/2024
Rome, Italy

PROFESSIONAL ACHIEVEMENTS

- 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
- Co-teaching for the course Statistical Learning in Epidemiology (UniTS, 2023/24)

CONFERENCE PROCEEDINGS

- 62nd Annual Meeting of the European Society for Paediatric Endocrinology (ESPE) 2024
Decreased serum DHEAS to cortisol ratio in adolescents evaluated for gender dysphoria
G. Tornese, G. Bresciani, A. Roia, et al.
doi: 10.1159/000541189
[Hormone Research in Paediatrics \(2024\) - open access](#)
- 50th Annual Conference International Society for Pediatric and Adolescent Diabetes (ISPAD) 2024
Carbohydrates intake in children and adolescents with type 1 diabetes mellitus and its relation with physical activity
C. Carletti, V. Manfredini, G. Tamaro, et al.
doi: 10.1159/000541195
[Hormone Research in Paediatrics \(2024\) - open access](#)
- 13th International Conference on Complex Networks and their Applications (CNA) 2024
RedKinNet: Node Centrality-Driven Kinship Matrix Reduction
P. Dalena, S. Geremia, G. Barbati, P. A. D'Adamo