# Marco Anteghini, PhD

## Contact

♥ Via Domenico Zampieri 28, 40129, Bologna, Italy

**4** +39 (340) 057 5348

## Links

in LinkedIn

**O** GitHub

Bioinform

Google Scholar

## Languages

Italian: Mother tongue

English: C1 German:A2

## **Skills and Technologies**

### **Programming**

♥ Python, Bash, SQL, R, LaTeX **Tools** 

Scikit-learn, TensorFlow, PyTorch, Git, Docker

### **Data Science**

Machine Learning, Deep Learning, Statistical Analysis, Data Visualization AI for Bioinformatics Protein sequence embeddings, Mutation analysis, NGS pipelines

## Other skills

- Statistical analysis
- Scientific writing
- Grant writing
- Al for Data Science
- NGS data analysis

## **Awards / Grants**

Marie Skłodowska-Curie ITN (H2020-MSCA-ITN-2018) LifeGlimmer, Sep 2019

Erasmus+ Study grant (2018-1-IT02-KA103-047045) University of Bologna, Mar 2018 Experienced AI-focused data scientist with a proven ability to translate complex datasets into actionable insights, both as an independent freelancer and within multidisciplinary teams. Skilled at leveraging cutting-edge machine learning and deep learning methods—such as AI-driven embeddings-to tackle diverse challenges across sectors, from bioinformatics to emerging industry applications. Adept at navigating academic and corporate environments, I bring both a strong theoretical foundation and hands-on project expertise that drive tangible results.

## **Education**

2019-2023 **PhD** in Bioinformatics Wageningen University and Research

Thesis: Revealing function, interactions, and localization of peroxisomal

proteins using Deep Learning-based approaches

2017-2019 M.Sc. in Bioinformatics University of Bologna

Thesis: Building MSMs and HMMs from MD data of the A- $\beta$ 40

2013-2017 B.Sc. in Biological sciences University of Ferrara

Thesis: Dietary indications for triathletes

## **Freelance Collaboration**

Oct 2023-ongoing

NGB Genetics

Bioinformatician

Bologna, Italy - Hybrid

Developing advanced bioinformatics pipelines for the analysis of nutrigenomic and microbiota data. My role involves designing and implementing efficient workflows to process and interpret complex biological datasets, leveraging AI methodologies to drive innovative research in personalized nutrition and gut microbiome health. This work entails close collaboration with interdisciplinary teams to translate data-driven insights into actionable health and dietary recommendations.

May 2024-ongoing

LifeGlimmer GmbH

Berlin, Germany - Remote

Bioinformatician and Operational Manager

Leading bioinformatics research in Decision Support Systems and AI, driving innovations in data analysis and predictive modeling. Assisting in the coordination of European projects, managing cross-functional teams, and overseeing project logistics and compliance. Contributing to research initiatives and grant proposals and optimizing operational processes.

July 2024-Jan 2025 CliCon srl - Hybrid

Bologna, Italy

Data Scientist and Data Manager

As a member of the data management group, I focus on filtering, standardizing, and analyzing administrative healthcare data sourced from local health institutions (SQL). This involves ensuring data integrity, optimizing workflows for efficient data handling, and employing advanced analytics to derive actionable insights.

# Marco Anteghini, PhD

## **Interests**

#### **Professional**

Co-founder of "Bioinform", an NGO that organise training schools in bioinformatics and AI.

#### Personal

Sport (Triathlon and Hiking) Music (guitar player and singer)

## References

Prof. Dr Conrad Tim (PI and employer at Z.I.B) Department of Visual and Data-Centric Computing, Zuse Institute Berlin, Takustraße 7 14195 Berlin, Germany conrad@zib.de

Prof.dr.ir. VM. dos Santos (PhD supervisor and employer) WUR University, System and Synthetic Biology, 6708 WE Wageningen, The Netherlands vitor.martinsdossantos@wur.nl

# **Collaboration as Employee**

May 2024-ongoing University of Bologna

**University of Bologna**Bologna, Italy - Hybrid *Postdoc - Bioinformatician* Working in the Biofold Unit at the Department of Pharmacy and Biotechnology (FABIT), I apply advanced AI methods to biological sequences to predict the impact of mutations on protein stability, function, and localization. This research is particularly focused on understanding how these mutations influence human health, with an emphasis on neurodevelopmental rare diseases. Through these projects, I contribute to unraveling the molecular basis of disease and identifying potential avenues for therapeutic intervention.

Dec 2022-Sep 2023 Zuse Institut Berlin

Berlin, Germany

Postdoc - Bioinformatician Working in the Biofold Unit at the Department of Pharmacy and Biotechnology (FABIT), I apply advanced AI methods to biological sequences to predict the impact of mutations on protein stability, function, and localization. This research is particularly focused on understanding how these mutations influence human health, with an emphasis on neurodevelopmental rare diseases.

Oct 2019-Sep 2023 LifeGlimmer GmbH

Berlin, Germany

PhD Student and Employee in association with the System and Synthetic Biology Group, Wageningen University, The Netherlands.

This project was part of an Innovative Training Network funded by the Marie Skłodowska-Curie Actions. In this industrial setting, I had the opportunity to develop projects both independently and in teams, interact with customers and stakeholders, and develop transversal skills and competencies such as familiarity with proposal writing and experience in business development. Moreover, the main research topic of my PhD was to explore the flexibility and applicability of deep learning-based protein sequence embedding in performing various prediction tasks.

# **Other experience**

2020-ongoing NVO Bioinformatika - Bioinform Herceg Novi, Montenegro

Co-founder of NVO Bioinformatika - Bioinform

Trainer in bioinformatics. President and co-administrator of the NGO.

2012-2018 C.U.S. Salvataggio Comacchio (FE), Italy

Lifeguard

Rescuer and supervisor for the safety of swimmers at the seaside.

2010-2012 **PCompany** Comacchio (FE), Italy

Lifeguard

Rescuer and supervisor for the safety of swimmers in private swimming pools and swimming pool maintenance technician.