Nicola Rosetti

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Summary

I am a hardworking, diligent and sociable person, always willing to cooperate, listen to others' opinions and ready to welcome new ideas. I am organized and consistent, skills that allow me to accomplish all my duties and at the same time pursue my passions that run from sport to art. Determination is one of my core qualities, together with the eagerness and passion I put in what I do; I am extremely curious, always enthusiastic of learning and discovering. I believe in people as the most precious resource we have, and for this reason I always encourage teamwork.

Work Experience

Exam marking Analysis 3, Functional analysis, Multivariable analysis, April-June 2025.
Supervisor of a group of first-year students at University of Warwick, October 2025-May 2026.
Teaching assistant for MA263 Multivariable Analysis, University of Warwick, January-March 2026.
Teaching assistant for MA271 Mathematical analysis 3, University of Warwick October-December 2025.
Supervisor of a group of first-year students at University of Warwick, October 2024-May 2025.
Teaching assistant for MA263 Multivariable Analysis, University of Warwick, January-March 2025.
Exam marking analysis 1, January 2025.
Tutor for MA397 Consolidation, University Warwick October-December 2024.
Teaching assistant for MA433 Fourier Analysis, University of Warwick October-December 2024.
Exam marking algebra 1, multivariable analysis, April, June 2024.
Teaching assistant for MA3K0 High-dimensional probability, University of Warwick January-March 2024.
Teaching assistant for MA263 Multivariable Analysis, University of Warwick January-March 2024.
Secondary school teacher January-June 2022.

Projects

Master thesis: The geometry of the deep neural networks

Supervisor: Emanuele Latini, professor of geometry at University of Bologna.
Co-supervisor: Rita Fioresi, professor of geometry at University of Bologna.

The aim of the thesis is to study the geometric properties of deep neural networks with the goal to better understand their work and possibly improve their efficiency.

Bachelor thesis on Rademacher's Theorem

Supervisor: Giovanni Cupini, professor of analysis at University of Bologna.
In the thesis it has been proven the theorem in two different ways: a more direct one by means of measure theory and a second one with the use of Sobolev spaces. In the end, an application to convex functions was proposed.

Conferences & Workshops

15-18/06/2026 INFORMED AI Summer School 2026.
26-27/02/2025 Impact activation workshop for mathematical scientists (mathematics for humanity).
10-14/02/2025 Graduate training for the mathematical sciences.
12-16/08/2024 Quantissima in the Serenissima.
13-15/12/2023 Critical phenomena in statistical physics, continuum theories and SPDEs.

Education

2023 - present PhD at Warwick university, supervised by Dr. Roger Tribe and Prof. Oleg Zaboronsky.

2021 - 2023 master's in Advanced mathematics for applications at University of Bologna Graduation mark 110/110 cum laude.

2023 Jan-Feb PhD course on deep neural networks by Rita Fioresi, University of Bologna.

2022 Nov mini course on Hopf monoids and polynomial invariants by Marcelo Aguiar, Cornell University.

2018 - 2021 Bachelor's Degree at University of Bologna Graduation mark 107/110.

2020 -2021 Exchange year at Cardiff university.

Skills

Technical skills	Basic knowledge of Python, Matlab.
Languages	Mother tongue Italian, fluent in English; advance understanding of Spanish and good speaking skills.
Transversal skills	I am passionate about teaching and I can speak to large audiences; I enjoy working in group and thanks to my joyful personality I usually create a cooperative and more productive environment. While studying I had a career as a ballet dancer, I achieved second grade black belt in taekwondo and competed at the Italian championships and University European championships; I have been student representative both in high school and University, I love hiking and cooking.

Side experience

Captain of Warwick taekwondo society 2025-2026.