



Ester Riccardi



Ph.D. student - University of Trento

About me

Research interests	I am a Ph.D. student in Computational Neuroscience and Generative AI at CIMEC (University of Trento, Italy). I am a data enthusiast with a strong foundation in mathematics and a keen interest in deep learning applications in neuroscience. My research currently focuses on brain-to-image decoding: reconstructing visual experience, mental imagery and dreams from brain activity using generative AI algorithms.
Hobbies	Outside academia, I enjoy playing board and video games, running, watching sports and reading.

Education

Sep 2025 - Current	Ph.D. in Cognitive and Brain Sciences <i>CIMEC - Center for Mind/Brain Sciences, University of Trento</i> Topic: Computational Neuroscience and Generative AI Advisors: Profs. Roberto Bottini (University of Trento) and Paolo Rota (University of Trento)
Sep 2022 - Oct 2024	MSc in Mathematics <i>University of Trento, Italy</i> Curriculum: Mathematics and Statistics for Life and Social Sciences Thesis: "Introducing causality in relational event models" Supervisors: Veronica Vinciotti (University of Trento), Ernst Wit (Università della Svizzera italiana) Final mark: 110/110 with honors
Sep 2019 - Sep 2022	BSc in Mathematics <i>University of Trento, Italy</i> Thesis: "Penalized inference in gaussian graphical models with symmetry constraints: an application to brain networks" Supervisor: Veronica Vinciotti (University of Trento) Final mark: 108/110

Experience

Oct 2024 - Jun 2025	Mathematics teacher at high school "ISIS O. Romero", Bergamo, Italy
Fall semester 2023 Fall semester 2022	Tutor of Calculus II at University of Trento
Jan 2023 - Oct 2023	Personal tutor for a student with special educational needs, during the writing of his master thesis in mathematics

Conferences

Sep 2024 | Poster at workshop “Innovation in dynamic modelling”, Lugano (CH)

Publications

2025 | M. Lembo, **E. Riccardi**, V. Vinciotti, E. Wit. *Causal drivers of dynamic networks*. In: *ArXiv*

Awards

Jul 2026 | ICVSS: Admitted to the International Computer Vision Summer School

Languages

Italian	Native
English	Fluent