Donatella Genovese

Curriculum Vitae



Personal information

First name Donatella
Last name Genovese
Date of birth 18/04/1997
Nationality Italian

Education

2023–Ongoing National PhD in Artificial Intelligence, Sapienza Università di Roma

o **Supervisor:** Prof. Simone Scardapane

2019–2022 M.Sc. in Mathematics, Sapienza University of Rome, Rome, Italy

o Subject: Neural networks

• Thesis title: "Effective training strategies for Restricted Boltzmann Machines"

o Supervisors: Prof. Elena Agliari, Dr. Alberto Fachechi

o Final grade: 110/110 with honors (25/01/2023)

2016–2019 B.Sc. in Mathematics, Sapienza University of Rome, Rome, Italy

o Subject: Mathematical analysis

• Thesis title: "Non-convex optimization in the Calculus of variations"

o Supervisor: Prof. Annalisa Malusa

o **Final grade:** 110/110 with honors (12/12/2019)

Feb 2019–Jun 2019 Erasmus+, Stockholm University, Stockholm, Sweden

o Courses: Complex analysis, Logic

Teaching Experiences

Apr 2025—Jun 2025 **Teaching Assistant**, Probability, Sapienza University of Rome, Department of Civil, Building and Environmental Engineering, Rome, Italy

Feb 2025–Apr 2025 **Teaching Assistant**, Statistical processes for Applied Sciences, Sapienza University of Rome, Department of Statistics, Rome, Italy

Mar 2024–Jun 2024 **Teaching Assistant**, Probability I, Sapienza University of Rome, Department of Mathematics, Rome, Italy

Sep 2022–Dec 2022 **Teaching Assistant**, Mathematical institutions I, Sapienza University of Rome, Department of Chemistry, Rome, Italy

Mar 2022–Jun 2022 **Teaching Assistant**, Mathematical institutions II, Sapienza University of Rome, Department of Chemistry, Italy

Working Experiences

dic 2021–dic 2022 **Content creator**, Creation of multimedia educational materials for the OF@ platform, Sapienza University of Rome

Oct 2021–Jan 2022 Junior Data Scientist, DEAS s.p.A., Rome, Italy

Sep 2020-Oct 2021 IT laboratory assistant, Sapienza University of Rome, Rome, Italy

Service

2024-ongoing **Phd and Research Fellow representative**, Academic Senate, Sapienza University of Rome, Rome

2022-2023 **Student representative**, Mathematical, Physical and Natural Sciences faculty council, Sapienza University of Rome, Rome

2020-2022 **Student representative**, Mathematics department council, Sapienza University of Rome, Rome

Activities

2023 **BrAIns**, *Co-Organiser*, Sapienza University of Rome, Rome Seminars on artificial intelligence and neurobiology

Since 2022 Member of BrainJuice

Groups of Master and PhD students with the aim of creating a space where people could meet and discuss topics about biological and artificial intelligence

Skills

Scientific Software

Matlab LAT_EX

Programming languages

C/C++Python

R

Python libraries

NumPy

Pandas

TensorFlow

PyTorch

Sklearn

Languages

o Italian: Mother tongue

o English: C1

PTE: 78/90 (Reading: 84, Listening: 68, Speaking: 79, Writing: 85)

Honors & Awards

 Albo Nazionale delle Eccellenze, National register of high-school graduates with 100 cum laude, certified by the National Institute for Documentation, Innovation and Educational Research (INDIRE), and the Minister of Education, Universities and Research (MIUR).

Publications

o Mixture-of-Experts Graph Transformers for Interpretable Particle Collision Detection, D. Genovese, A. Sgroi, A. Devoto, S. Valentine, L. Wood, C. Sebastiani, S. Giagu, M. D'Onofrio, S. Scardapane