Gonçalo Santos Paulo



About me

I've always wanted to be a scientist. I love learning about a problem, brainstorm about solutions and discuss with other people my ideas. I've always enjoyed learning, and I think that helps me be a good discussion partner.

personal

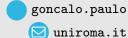
Gonçalo Santos Paulo Nationality: Portuguese Date of birth: 25/08/1997

Areas of specialization

Condensed matter Physics
Computational Physics

Interests

I'm very interested in AI safety. I'm also very sociable and active around people.





SHORT RESUMÉ

2024

Interpretability research Intern

· EleutherAI 9

Currently researching interpretability methods using Sparse Autoencoders, maily using automated interpretability tools.



2023-2024

PostDoc

· Sapienza university of Rome 💡

Research focused on memristive behaviour due to hydrophobic gating, nanofluidics, and intrusion in hydrophobic materials.



DEGREES

2023 Theoretical and Applied Mechanics

SAPIENZA UNIVERSITY OF ROME • 1

2020 Physics

MASTER DEGREE -Faculty of Science University of Lisbon in

2018 Physics

BACHELORS DEGREE
• Faculty of Science
University of Lisbon in



CERTIFICATES & GRANTS

2022 Grant of computer resorces on the Italian SuperComputing Resource Allocation (IRCA-C project)

LANGUAGES

PortugueseC2mother tongueEnglishC2• • • •ItalianB1• • • •

TALKS

March 2022

"Building an artificial neuron with simple hydrophobic nanopores: a one component memristor", at: *American Physical Society* online.

Programming



PUBLICATIONS

2024 Does Transformer Interpretability Transfer to RNNs?, ArXiv.

2023 Hydrophobically gated memristive nanopores for neuromorphic applications, Nature Communications.

2023 The impact of secondary channels on the wetting properties of interconnected hydrophobic nanopores, Communications Physics.

2023 Optimization of the Wetting-Drying Characteristics of Hydrophobic Metal Organic Frameworks via Crystallite Size: The Role of Hydrogen Bonding between Intruded and Bulk Liquid, Journal of Colloid and Interface Science

2023 An atomistically informed multiscale approach to the intrusion and extrusion in hydrophobic nanopores, Journal of Chemical Physics

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