

Dario Coscia

Nationality: Italian

Place and date of birth: Rome, 02 September 1999

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🌐 <https://www.linkedin.com/in/dario-coscia/>

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Work Experience

- 2022 – 2023 📌 **Machine learning researcher**
Research fellow at SISSA *mathLab* group in the field of Deep Learning.
- Working on deep generative modelling for differential equation learning.
 - Developing Physics Informed Neural Networks and Neural Operator learning for dynamical system modelling, contributing to PyTorch software [PINA](#).
 - Exploring Neural Network learning for unstructured data.
- 2020 – 2021 📌 **CNR-IOM**
Internship at CNR-IOM Trieste in the field of computational solid-state physics. Building statistical and energetical models, and developing software for testing.

Education





- 2023 – ···· 📌 **PhD Student**
SISSA, Trieste Italy - UvA, Amsterdam - The Netherlands
Generative Modelling for uncertainty quantification
Neural Operator and Physics Informed learning for solving differential equations
- 2021 – 2023 📌 **Master's degree Data Science and Scientific Computing**
University of Trieste, Trieste Italy
Artificial Intelligence and Machine learning path
Thesis title: *A generative adversarial method for reduced order modelling*
- 2018 – 2021 📌 **Bachelor's degree Physics**
University of Trieste, Trieste Italy
Grade: 110/110 "cum laude" (graduated with distinction)
Thesis title: *Modelling the energetics of graphene on a Nickel surface*
- 2016 – 2018 📌 **United World College of South East Asia**
Singapore, High School
International Baccalaureate (English language)
Grade: 40/45 and bilingual diploma

Research Publications



- 1 Coscia, D., Demo, N., & Rozza, G. (2023). Generative adversarial reduced order modelling. *arXiv preprint arXiv:2305.15881*.
- 2 Coscia, D., Ivagnes, A., Demo, N., & Rozza, G. (2023). Physics-informed neural networks for advanced modeling. *Journal of Open Source Software*, 8(87), 5352. 🌐 doi:[10.21105/joss.05352](https://doi.org/10.21105/joss.05352)

- 3 Coscia, D., Meneghetti, L., Demo, N., Stabile, G., & Rozza, G. (2023). A continuous convolutional trainable filter for modelling unstructured data. *Computational Mechanics*, 1–13.
[doi:10.1007/s00466-023-02291-1](https://doi.org/10.1007/s00466-023-02291-1)

Awards and Achievements

- 2021  **SISSA merit scholarship**, the MSc in Data Science and Scientific Computing at University of Trieste SISSA ICTP and University of Udine
-  **Collegio Universitario Luciano Fonda Scholarship**, for outstanding students studying at the University of Trieste
- 2019  **Lucia Malagnini Physics Scholarship**, for the best student in the Physics department at the University of Trieste
- 2016  **United World College Scholarship**, for outstanding students studying in Italy to attend the prestigious UWC college.

Additional information

- Languages  **Italian:** native speaker
English: full professional
Spanish: professional working
- Computer skills  High experience in Python programming language
- High experience in PyTorch framework for Deep Learning
 - Experience in ML software: Scikit-learn, Pyro and JAX
- Experience in C++ and Fortran 90 programming languages

Reference Available Upon Request

Curriculum Vitae last update: March 2, 2024