

# Dario Coscia

**Nationality:** Italian

**Place and date of birth:** Rome, 02 September 1999

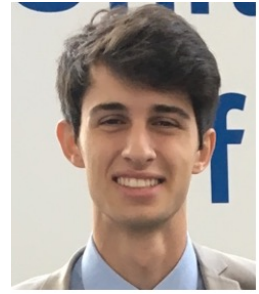
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🐙 <https://github.com/dario-coscia>



## Work Experience

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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

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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

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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

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- 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

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- 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:* November 26, 2023