

# PEDRANI NICOLO

## Specialist Consultant R&D Engineer

☎ +393318555226

🌐 <https://www.linkedin.com/in/nicolo-pedrani>

@ nicolo.pedrani@gmail.com

📍 Milano



## SUMMARY

Specialist Consultant R&D Engineer with a passion for leveraging machine learning algorithms to drive impactful solutions. Demonstrated experience in developing complex electronic systems and collaborating with diverse teams to achieve client goals. Eager to contribute to a mission-driven organization, working alongside experts to address pressing challenges in the private, public, and social sectors. Excited to utilize analytical skills and data-driven mindset to drive lasting improvements and create positive change.

## WORKING EXPERIENCE

### Specialist Consultant R&D Engineer

#### Teoresi Spa/Leonardo Spa

📅 12/2023 📍 Milan Italy

- Aerospace and Defence specialist consultant collaborating with system engineers to embed machine learning algorithms

### Data Scientist

#### Deloitte Consulting

📅 10/2022 - 12/2023 📍 Milan Italy

- Spearheaded digital transformation by designing advanced data science and analytics tools.
- Energy, Retail and Fashion industries.

## EDUCATION

### Ph.D. Materials Science and Nanotechnology

#### Università degli studi Milano Bicocca / Italian Institute of Technology

📅 09/2021 - 10/2022 📍 Milan, Italy

- supervisor Prof. Michele Parrinello
- My research activity was focused on the integration of machine learning and enhanced sampling techniques to study Rare events in physics, chemistry and biology

### M.Sc. in Physics

#### Università degli studi di Milano

📅 01/2019 - 01/2021 📍 Milan, Italy

- 110/110 cum laude
- Master thesis: Sythetic ecosystems with DNA strings: simulations and modelling
- Supervisors: Prof. Samir Suweis, Prof. Davide Galli and Dr Francesco Mambretti

### B.Sc. in Physics

#### Università degli studi di Milano

📅 01/2015 - 01/2018 📍 Milan, Italy

- 110/110 cum laude
- Bachelor thesis: Modeling and Simulation of electrical transport in nanostructures
- Supervisors: Prof. Davide Galli and Dr Francesco Mambretti

## SKILLS

Machine Learning

C++

Data Science

Excel

Github

Mathematica

Matlab

Python

Sql

Power Point

Client Management

Problem-Solving

Data Visualization

## CERTIFICATION

### McKinsey Forward Program

2024 - Mckinsey & Company

### Google Advanced Data Analytics Specialization

2024 - Coursera

### Google Project Management Specialization

2024 - Coursera

### Stanford University Machine Learning course

2020 - Coursera

## LANGUAGES

English

Proficient



Italian

Native



## FIND ME ONLINE



GitHub Pages

<https://nicolopedrani.github.io>



LinkedIn

<https://www.linkedin.com/in/nicolo-pedrani>

TRAINING / COURSES

Invited speaker to Understanding complexity through italian scientists talks	High Performance Molecular Dynamics Course	Molsim: Understanding Molecular Simulations
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PUBLICATIONS

OxDNA to Study Species Interactions

Entropy (2022), 24(4), 458

F. Mambretti, N. Pedrani, L. Casiraghi, E. M. Paraboschi, T. Bellini and S. Suweis

📅 2022    🔗 <https://doi.org/10.3390/e24040458>

Molecular ecology models DNA interactions competitively

Dynamical stochastic simulation of complex electrical behavior in neuromorphic networks of metallic nanojunctions

Scientific Reports volume 12, Article number: 12234

F. Mambretti, M. Mirigliano, E. Tentori, N. Pedrani, G. Martini, P. Milani and D. E. Galli

📅 2022    🔗 <https://doi.org/10.1038/s41598-022-15996-9>

Nanostructured Au films showing neuromorphic potentia

ADDITIONAL EXPERIENCE

University Tutor

Camplus College

📅 2018 - Present    📍 Milano (MI)

- Boosted engineering exam scores by delivering customized private lessons.

Football Coach

School Of Sport

📅 2019 - 2022    📍 Busto Arsizio (VA)

- Coached a team of 25 children, enhancing their football skills and team collaboration.

Tour Guide

FLABS, Fondazione Lombardia per l'Ambiente

📅 2018 - 2020    📍 Seveso (MI)

- Increased students' comprehension of physics phenomena by guiding 30+ students through scientific experiments.

High School Teacher

High School Sacro Cuore

📅 01/2021 - 09/2021    📍 Gallarate (VA)

- Teaching students Informatics

VOLUNTEERING

Volunteer Sales Assistant

CUSL

📅 2015 - 2019

Unwaged work at the University Cooperative "Studio e Lavoro", with the aim of selling essential stationery for university students

Volunteer Companion

Alecrim

📅 2018 - 2022

Voluntary work with disabled people

PASSIONS

💎 Football	💎 Traveling	💎 Reading
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GDPR

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