


Francesco Sacco

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 github.com/Francesco215

About me:

I'm a highly curious, problem solving-oriented physics graduate, interested in machine learning and wanting to work in bioinformatics.

If you are looking for someone who's not afraid of tackling new challenges, I am a good fit for you!

Skills:

Physics
Math
Machine Learning
Statistics

Soft Skills:

Creativity
Critical thinking
Problem solving
Teamwork

Digital Skills:

| | |
|------------|-------|
| Python | ★★★★★ |
| Git | ★★★★★ |
| Pytorch | ★★★★★ |
| C | ★★★★★ |
| Javascript | ★★★ |
| Pandas | ★★★ |
| HTML/CSS | ★★★ |
| Docker | ★★ |

Languages:

| | |
|---------|---------|
| Italian | Native |
| English | Fluent |
| Spanish | Limited |

Research:

Adversarial Takeover of Neural Cellular Automata

JULY 2022, Alife conference

Published a machine learning paper about computer vision and biological systems in collaboration with Allen discovery center and Google researchers and presented it at the Artificial Life conference

https://letteraunica.github.io/neural_cellular_automata/

Projects:

Quantum computing development

JULY 2021, Europe Qiskit Hackathon 2021 - IBM

Quantum computing program aimed to make a quantum version of the Hamming and Reed-Solomon error correction codes

<https://github.com/Dirac231/BCHamming>

Software development

2019 - 2020, Lab 3 course

A python library that, given the data from the electronic instrumentation, calculates the uncertainty of the measurements, does data processing and can output the results directly into Latex.

It can be used to halve the time to produce a lab report and many course mates used it

<https://github.com/LetteraUnica/menzalib>

Software development

2021, Complex Systems course

A web page with interactive data visualization of the logistic map for the exam of complex systems at the University of Pisa

https://francesco215.github.io/logistic_map/

Studies:

Masters degree in Solid State Physics

2019 - 2022, University of Pisa

Thesis: Non-Local Topological Valley-Hall Effect in Bilayer Graphene

Skills learned: Solid state physics, Statistical physics, Quantum computing, Optics, Machine learning, Complex systems

Qiskit global summer school 2021

2021, IBM

2 week-long summer school about quantum machine learning

Bachelor in Physics

2016 - 2019, University of Pisa

Skills learned:

Classical mechanics, Electromagnetism, Quantum Mechanics, Special Relativity, Calculus, Linear Algebra, Group Theory