



Luca Morselli

Applied Nuclear Physicist

February, 3rd 1994
 lucamors_1
 www.lucamorselli.me
 luca@lucamorselli.me

About Me

I am passionate about applied and computational physics, in particular within the field of nuclear science and technologies (e.g., environmental and medical applications). I like working in a multidisciplinary context to learn new things.

Social Network

ResearchGate Profile
 Github Profile
 LinkedIn Profile
 Youtube Channel

Skills

C,C++,Python
 HTML, CSS, Javascript, PHP, MySQL
 FreeCAD for MCAD
 Good knowledge of GNU/Linux OS
 QGIS

Working Experience

Nov 2022 – currently **Data Scientist** Finapp S.R.L.
➤ Development of ML/DL algorithms for extracting information from Cosmic Rays Neutron Sensing probes data for geospatial applications.
➤ Upgrade and maintenance of the company webapp, both backend and frontend.
➤ Developing realtime data analysis infrastructure.

Academic Experience

Co-author of 12 peer-review publications on international journals .
 Co-supervised 5 bachelor thesis and 2 master thesis.
 Participation in various dissemination events (Researchers Night, High School Student stages).

Education

Study

Nov 2019 – Mar 2023 **Ph.D. in Physics** Università degli studi di Ferrara
My Ph.D. research project was carried out within the framework of the **ISOLPHARM** collaboration which is aimed at the study of innovative radioisotopes for medical applications.
Ph.D. Thesis Supervisors: Prof. D. Bettoni & Dr. A. Andrichetto
Title : Production and Characterization of Silver-111 radioisotope for medical applications.

Jun 2020 – Aug 2020 **Machine Learning and Data Analysis for Nuclear Physics** NUCLEAR Talent School
The final project was aimed at the discrimination of relevant event from background in an Time Projection Chamber Active Target using different Deep Learning algorithms both supervised and unsupervised.

Oct 2017 – Oct 2019 **Master Degree in Physics** Università degli studi di Padova
Curriculum : Physics of Fundamental Interactions
Grade: 110/110
Master thesis Supervisor: Dr. Luca Stevanato
Title: A novel cosmic-ray neutron detector for soil moisture estimation over large areas.

Apr 2017 – Sept 2017 **Research Scholarship** Università degli studi di Padova
Title: Neural Networks based algorithms for neutrons/gamma discrimination in plastic and liquid scintillators.

Oct 2013 – Apr 2017 **Bachelor Degree in Physics** Università degli studi di Padova
Grade: 95/110
Bachelor Thesis Supervisor: Prof. Marcello Lunardon
Title: Neural Networks algorithms for neutrons/gamma discrimination in plastic scintillators for environmental physics applications.

2009 – 2013 **High School Diploma** Istituto Istruzione Superiore A. Strozzi
Technical Degree: Agrotechnician
Grade: 93/100