# **Enrico Manosperti**

**Phone:** +39 3284172147

Address: 9, Via della Costituzione, Barletta, 76121, Italy

Website: LINKEDIN: www.linkedin.com/in/enrico-manosperti-64a8a0169, RESEARCHGATE:

www.researchgate.net/profile/Enrico\_Manosperti

**Email**: enricomanosperti@live.it

Born on 29th June 1993 in Barletta (Italy). My main fields of interest are the particle and accelerator physics, a high knowledge of data analysis and statistics, and different programming languages like C++, Python. The relation with other people, the communication and the teamwork are my strengths, in fact, during my studies at the university and all jobs I've always given my best, encouraging myself to learn from my mistakes and continuously improve.

#### **EXPERIENCE**

CERN Mar 2018 to Aug 2018

#### **Technical Student**

- Designed the optics of the transfer line LINAC3-LEIR and LEIR-PS.
- Evaluated 21 quadrupoles in LINAC3-LEIR
- Evaluated 11 quadrupoles in LEIR-PS.
- Analyzed the beam intensity and stability, along about 35 km of accelerators, from LEIR to LHC.
- Developed a program with MadX for the optics simulation of 26 magnets.
- Implemented 2 programs with Python for the beam intensity analysis LINAC3-PS.
- Prepared an automatic program with Python for the beam efficiency along 4 accelerators, LEIR-PS-SPS-LHC.

**CERN**Mar 2016 to Dec 2016

#### **Technical Student**

- Calibrated the first 5 Beam Position Monitors for CLiC.
- Used different tools for the optics of the 5 magnets.
- Implemented 2 programs with MATLAB for data acquisition and data analysis.

#### **EDUCATION**

# University of Pisa

Sep 2016 to present

#### Master of Science in High Energy Physics

- Studies on the experimental and theoretical particle physics.
- Studies on other fields such as acceleration physics and general relativity.
- Used of different programming languages like C, C++ and Python.

# University of Pisa Sep 2013 to Sep 2016

#### Bachelor of Science in Physics

- Studies concerning all fields of the theoretical physics.
- Quantum mechanics, electromagnetism, particle interactions.
- Laboratory jobs to improve experimental skills.
- Classical mechanics, statistical mechanics, physics of matter.

#### **SKILLS**

- Principal skills: Physics, Engineering, Data analysis, Numerical Analysis, Statistics, Maths, Programming, Data Engineering.
- Programming langauges: Python (Pandas, Numpy, Matplotlib, Seaborn, Scikit-learn, Scipy), C, C++, SQL.
- Relational Database Management System: DB2
- Cloud computing services: Google Cloud Platform, IBM Cloud.
- Development environment and server software: Jupyter Nootebook, MATLAB, TensorFlow, Apache Zeppelin, Watson Studio, MS office, Root.
- Machine learning algorithms: Classification, Clustering, Regression.
- Data skills: Big data, Structured data, Unstructured data, Databases, Data processing, Data visualization.
- Other computer skills: Application Programming Interface (API), Artificial Intelligence (AI), Problem Solving.
- Other: Electronics, Projects, Teamwork, Leading, Designing, Communication, Operations, Recommender Systems.

#### LANGUAGES

English (Professional working proficiency), Italian (Native or bilingual proficiency)

# CAREER GOALS

Physics, Science, Research, Technology, Data Analyst, Data Scientist

#### **PUBLICATIONS**

## **Updated Baseline for a Staged Compact Linear Collider**

Sep 2016

# The Compact Linear Collider (CLIC) - 2018 Summary Report

Jan 2018

#### **CERTIFICATIONS**

#### **IBM Data Science Professional Certificate**

#### Coursera

- Data Science Orientation
- Data Science Methodology
- Open Source Tools for Data Science
- Python for Applied Data Science and AI
- Databases and SQL for Data Science
- Data Analysis with Python
- Data Visualization with Python
- Machine Learning with Python

## Data Engineering, Big Data, and Machine Learning on GCP Specialization

#### Coursera

- Google Cloud Platform Big Data and Machine Learning Fundamentals
- Leveraging Unstructured Data with Cloud Dataproc on Google Cloud Platform

## **AI Foundations for Everyone**

#### Coursera

#### **Artificial Intelligence Foundations Specialist**

- Introduction to Artificial Intelligence (AI)
- Getting Started with AI using IBM Watson
- Building AI Powered Chatbots Without Programming