Personal information

Surname(s) / First name(s)	**Picca, Eleonora**
Nationality(-ies)	Italian
Gender	Female

Education and training

Place and Date	Università La Sapienza, Rome, Italy, September 2020 – January 2021
Title of qualification awarded	***Quantum Information and Computation (single exam)***
Mark	30/30 cum laude
Details	Single course on quantum computing, part of the master degree in physics. Final exam on Quantum Support Vector Machine.

Place and Date	Università degli studi Roma Tre, Rome, Italy, 2012 – 2015
Title of qualification awarded	***Ph.D in Particle Physics***
Details	Research activity in theoretical particle physics within an European collaboration.

- Data analysis: data preparation (jacknife, bootstrap) and statistical analysis of data coming from Monte Carlo numerical simulations.

- Interpretation and presentation of the results.

- Acquisition of programming knowledge and skills (Fortan, C, bash scripting).

- International conferences and schools.

- International presentations of scientific results. Oral presentation at the "31st International Symposium on Lattice Field Theory" in Mainz, Germany in 2013 about the work done in my first year as a Phd student.

- Several publications (Publication list 1, Publication list 2)

Place and Date	Università degli studi Roma Tre, Rome, Italy, 2010 – 2012
Title of qualification awarded	***Master's Degree in Physics***
Mark	110/110 cum laude

Place and Date	Università degli studi Roma Tre, Rome, Italy, 2007 – 2010
Title of qualification awarded	***Bachelor's Degree in Physics***
Mark	110/110 cum laude
Details	*Theoretical lessons and practical laboratory programming classes:*

- *C, C++.*

- *Fortran.*

Place and Date	Liceo Scientifico Ettore Majorana, Rome, Italy, 2002 – 2007
Title of qualification awarded	***High School Scientific Diploma***
Mark	100/100 cum laude
Details	*PNI (Piano Nazionale Informatico) class with Turbo Pascal laboratory class.*

Work experience

Place and Date	IBM, Rome, Italy, 1st June 2019 – in progress
Occupation or position held	***Data Scientist - IBM Quantum Ambassador and Qiskit Advocate***
Details	Activity as a data scientist within an IBM Cloud pre-sale group. The group aims to create valuable MVPs (Minimal Viable Products) for clients of several industries. I am also very active as a Quantum Ambassador and Qiskit Advocate (https://qiskit.org/advocates/) in the quantum computing field, organizing lessons at universities and high schools and workshops with clients.
Place and Date	IBM, Rome, Italy, 1st October 2017 – 1st June 2019
Occupation or position held	***Big Data Business Analytics and IoT Consultant***
Details	Activity as a senior Big Data and IoT consultant.
Place and Date	IBM, Rome, Italy, 13th April 2015 –1st October 2017
Occupation or position held	***Junior Big Data Business Analytics and Strategy Consultant***
Details	Activity as a consultant within the IBM European CbD (Consultant by Degree) career–accelerating program.

I had the chance to work with different clients and using innovative technologies:

- Experience in a **"Big Data transformation"** project in the telecommunication sector.

  Creation of a DataLake, a modern, flexible and scalable data platform in order to leverage the business value of emerging technologies in the areas of Big Data, Advanced Analytics and Cognitive Computing, in which we are collecting different types of data coming from various sources.

  Starting from the DataLake we are building several use cases of business interest manipulation data using Apache Spark (Scala).

  Activity af the developer team coordinator and as one of the main responsible of the mechanism of the data ingestion in the Hadoop file system. I also have the responsibility of the costumer–facing aspects of the project.

  During this work experience I developed skills in the following fields:

    * Data warehouse ETL processes;
    * Data Ingestion in the DataLake;
    * Data normalization and preparation for data scientists;
    * Python;
    * Bash scripting;
    * Hadoop file system, hadoop scripting (bash);
    * Big Data developer using Apache Spark (Scala) for data transformations and Apache Hive;
    * Functional analysis and client facing;
    * Activity organization;
    * Leadership and mentoring;
    * Team building

- Work in a IoT project with a major assurance company as part of the Big Data analytic team, responsible of collecting and analyzing the new IoT data, in order to create new business values.

Place and Date	Università degli studi Roma Tre, Rome, Italy, 2012 – 2015
Occupation or position held	***PhD student in theoretical particle physics (statistical data analysis)***

Details | During my experience as a PhD student I had the possibility to develop skills in:

– Data preparation.

I analyzed data coming from Monte Carlo numerical simulations which had to be prepared in order to perform the analysis. In particular I used re–sampling methods like jackknife and bootstrap.

– Statistical methods and data analysis.

I applied fitting methods to the data sets, using custom and original Fortran and C programs with proper fitting libraries, choosing and testing different fit results.

– Results presentation.

In many occasions I presented my results to both experts and non–experts odience.

Personal skills and competencies

Mother tongue(s) | **Italian**

Other language(s)
Social skills and competencies | English, level C1

– Good team working attitude, coming from both research and consulting experiences.

– I acquired good communicational skills during seminars, international conferences and schools around Europe. Fluent english conversations.

– Mentoring attitude acquired both from my teaching experience as a Graduate Teaching Assistant (GTA) and from guiding new hired colleagues in the project.

– I developed leadership skills being both the coordinator and leader of the developer team and also the lead consultant in the project.

– Sharing and teaching activities in the quantum computing field, in universities, high schools and workshop with clients.

Organizational skills and competencies |

– Good organizational skills developed to fulfill the requested duties and to coordinate the work of the team members.

– Good problem–solving attitude acquired both during my scientific research activity and my experience as a consultant where I had to deal with and resolve daily problems and issues.

– Attitude for innovation in front of new challenges in order to find the most efficient solutions using new technologies.

Computer skills and competencies	During my research activity and my work experiences I acquired several informatics competencies.

- Programming languages:
    * C: intermediate
    * Fortran: intermediate
    * Bash scripting: intermediate
    * LaTeX, Beamer
    * SQL
    * Scala Spark: advanced
    * Hive: intermediate
    * Python (Pandas, SciPy, NumPy): intermediate
    * Qiskit (quantum computing): intermediate

- Data warehouse developer (ETL) using IBM Infosphere Datastage

- Big data programmer on Hadoop environment using Scala / Apache Spark

- Good knowledge of IBM Infosphere Datastage, Aginity Workbench for IBM Netezza

- Good knowledge of UNIX environments.

- Good knowledge of Windows, Linux and Mac OS operation systems.

- Basic knowledge of Wolfram Alpha Mathematica and XmGrace.

- Good knowledge of Microsoft Office (Excel, Word, Power Point, Access). ECDL european license in 2007.

Driving licence(s)	B

Additional information

Scientific Publications
Several scientific publications within the European Twisted Mass (ETM) collaboration.

Personal interests
Technology (in particular quantum computing), travel, sport, running, social networks, music, cinema.
I always try to improve myself personally and professionally. What I like the most is to learn and to face new challenges. **Never stop learning and experimenting**.
I also really love to travel so I would really like to have new experiences abroad. I also like working with other people.

Certifications
IBM Data Science Professional Certificate.

- License number: U8QKLLPRKLBU.

- Certification authority: Coursera.

Qiskit Advocate

Autorizzo al trattamento dei miei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.