GIACOMO **FRANCESCHETTO**

Curriculum Vitae

Vicenza, Italy
franceschettogcm@gmail.com
in Giacomo Franceschetto ○ GiacomoFrn

💼 EXPERIENCE

RESEARCH INTERN IN QUANTUM ALGORITHMS
Institute of Photonic Sciences - ICFO 📍 Barcelona

October, 2022
July , 2022

I joined the Quantum Information Theory Group led by A. Acín thanks to the Student Research Fellowship. My research focus is on quantum algorithms for relevant industrial applications. Specifically, I am working on a project that aims to solve an optimization problem with the D-Wave quantum annealer.

RESEARCH INTERN IN SPACE QUANTUM COMMUNICATION
Department of Information Engineering, UniPD 📍 Padua

Present
November, 2021

I am working within the Space Quantum Communications research group. My task consists in using orbit prediction tools to estimate the round trip time of photons and try to correct the delay due to the doppler effect in space quantum communication processes between the Matera Laser Ranging Observatory and ILRS satellites.

SUMMER RESEARCH INTERN
Institut Laue Langevin - ILL,
European Synchrotron Radiation Facility - ESRF 📍 Grenoble

September, 2021

Selected for the "ESRF/ILL International Student Summer Programme on X-Ray and Neutron Science" and worked on the project "Neutron Spectroscopy and phonon background estimation in MOF-based Room-Temperature Magnets". Supervisor: R. T. Christiansen.

RESEARCH INTERN
Legnaro National Laboratories, INFN 📍 Padua

June, 2021
October, 2020

Developed a data-analysis framework for the processing of continuously read-out data from a cosmic muon detector. Supervised by Prof. M. Zanetti and Prof. J. Pazzini.

MATH AND PHYSICS TUTOR
Penta Formazione Srl 📍 Creazzo

March, 2022
November, 2018

Tutored more than 50 High School and University students in Mathematics, Physics and Computer Science.

📖 EDUCATION

M.SC. QUANTUM PHYSICS
University of Innsbruck - Erasmus exchange semester 📍 Innsbruck

February, 2023
October, 2022

M.SC. PHYSICS OF DATA
University of Padua, GPA: 29.33/30 📍 Padua

Present
2021

Revelant courses: Machine Learning, Statistical Mechanics, Data Processing and Data Management, Advanced Statistics for Physics Data Analysis, Neural Networks and Deep Learning.

B.SC. PHYSICS
University of Padua, Final Grade: 110/110 cum laude 📍 Padua

2021
2018

Elective courses: Computational Methods in Physics, C++ and Object Programming, Introduction to Quantum Infromation Theory. Thesis work entitled "Development and Validation of ML-based trigger algorithms".

LICEO SCIENTIFICO G.B. QUADRI
Applied sciences curricula, 100/100 cum laude 📍 Vicenza

2018
2013

🧍 VOLUNTEERING

SCOUT LEADER 📍 Sovizzo

Present
2019

I manage a team of 5 educators to propose activities for a group of 40 teenagers. I attended several trainings to develope my leading skills and actively contributed in the organization of an event with more than 500 partecipants.

LANGUAGES

Italiano   native
English   fluent

PROGRAMMING LANGUAGES

C++   intermediate
Experience with standard libraries and ROOT, a physics data analysis library.

Python   intermediate
Experience with Matplotlib, Numpy, Scipy, Pandas, Sklearn, Keras and Qiskit.

R   beginner
VHDL   beginner
MATLAB   beginner
SQL   beginner

AWARDS

Mille e una lode **Scholarship**
Scholarship based on GPA for top 3% students. Selected for the A.Y. 2018/19, 2019/20 and 2020/21.

Mentee at LeadTheFuture (LTF)
Among the few Italian students selected to be mentees for LTF, a leading mentorship non-profit organization for students in STEM, with acceptance rate below 20%.

CERTIFICATIONS

Certificate of Quantum Excellence
2021 Qiskit Global Summer School on Quantum Machine Learning

IBM Quantum Challenge 2021
Advanced Level

First Certificate in English
Cambridge English Qualification

ECDL Full Standard
European Computer Driving Licence