



Matteo Grotti

Date of birth: 17/09/1999 | **Nationality:** Italian | **Gender:** Male | **Phone number:** (+39) 3383568579 (Mobile) | **Email address:** matte.grotti@gmail.com | **Address:** Via Piangipane 50, 48124, Ravenna, Italy (Home)

WORK EXPERIENCE

15/07/2016 – 10/08/2016 Ravenna, Italy

WAREHOUSE WORKER TOWN DRUGSTORE N°8 WAREHOUSE

I applied for an internship as a warehouse worker in a the most important drug warehouse of my town. It lasted 5 weeks, 8 hours per day.

My role was to stock drugs, deliver drugs to drugstores and keep the inventory. I developed skills concerning the usage of management softwares

01/10/2021 – 31/08/2023 Ravenna, Italy

PRIVATE TUTOR NO EMPLOYER

Since I got the Bachelor's degree in Physics in September 2021, I tutored high school students in mathematics and physics helping them in passing their exams one to four times a week (more than 200 hours in total). This job makes me train myself on how to teach various topics and subjects to someone who is not supposed to know them in the most efficient way

EDUCATION AND TRAINING

01/11/2023 – CURRENT Bologna, Italy

PHD IN THEORETICAL PHYSICS University of Bologna

I'm currently working on the application of variational algorithms to quantum many body models on the Pasqal's Pulser platform

Address Via Irnerio 46, 40126, Bologna, Italy | **Website** www.unibo.it | **Field of study** Physics |

Level in EQF EQF level 8

15/09/2021 – 27/10/2023 Bologna, Italy

MASTER'S DEGREE IN THEORETICAL PHYSICS University of Bologna

I attended courses on:

Quantum Field Theory
Statistical Mechanics
Quantum Many Body Theory
Quantum Computing
General Relativity
Nuclear Physics

My thesis project dealt with the improvement of the classical optimization in a hybrid quantum-classical algorithm called QAOA applied to the Ising model with transverse field on the IBM Qiskit platform

Address Via Irnerio 46, 40126, Bologna, Italy | **Website** www.unibo.it | **Field of study** Physics |

Final grade 110/110 | **Level in EQF** EQF level 7 |

Thesis Optimization schedules for the Quantum Approximate Optimization Algorithm

15/09/2018 – 24/09/2021 Ferrara, Italy

BACHELOR'S DEGREE IN PHYSICS University of Ferrara

I attended courses on:

Advanced Calculus and Linear Algebra
Classical Physics, Thermodynamics, Electromagnetism
Quantum Mechanics
Nuclear Physics
Astrophysics
Solid State Physics

My thesis project regarded the observation of phase transition from a antiferromagnetic to ferromagnetic random bond Ising model by means of the quantum annealer D-Wave 2000Q

Address Via Saragat 1, 44121, Ferrara, Italy | **Website** www.unife.it | **Field of study** Physics |

Final grade 110/110 Cum Laude | **Level in EQF** EQF level 6 |

Thesis Analysis on the phase transitions in spin glass models by means of quantum annealers

15/09/2013 – 05/07/2018 Ravenna, Italy

HIGH SCHOOL LEAVING QUALIFICATION IN SCIENTIFIC STUDIES Liceo Scientifico "Alfredo Oriani"

I attended courses of:

Mathematics
Natural Sciences (Physics, Chemistry, Biochemistry, Biology, Earth Sciences)
Italian Literature and Language
History and Geography
Philosophy
Art

Address Via Cesare Battisti 2, 48121, Ravenna, Italy | **Website** www.liceoscientificoravenna.edu.it |

Field of study Biology , Biochemistry , Physics , Chemistry , Earth sciences | **Final grade** 100/100 Cum Laude |

Level in EQF EQF level 4 |

Thesis The discover of the Higgs Boson and the philosophical debate on quantum mechanics

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
SPANISH	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced | Google Suite (Doc, Slides, Form, Sheet, Drive) | Good use of Microsoft app, social network, internet search engines and e-mail | Python advanced | C/C++/C# (Basic) | team-work in team | Proficiency of using computer and internet | Problem analysis & Problem Solving