Europass Curriculum Vitae

Personal information

Name / Surname	**Daniotti Simone**
Nationality	Italian
Date of birth	12 03 1994
Gender	Male

Education and training

Dates	2009 - 2013
Name and type of organization providing education and training	Secondary School focusing on Scientific study "Vittorio Bachelet", Milan, Italy

Dates	October 2014 - February 2018
Name and type of organization providing education and training	Università degli Studi di Milano, Physics department, Milan, Italy
Title of qualification awarded	Bachelor Degree in Physics
Thesis	Quantum teleportation in the presence of random telegraph noise
Supervisor	Prof. Matteo G.A. Paris

Dates	November 2019
	Won University grant to do MSc thesis abroad.

Dates	January 2020 - July 2020
Name and type of organization providing education and training	Sony Computer Science Laboratories, Paris, France
Contract	Internship

Dates	February 2018 - July 2020
Name and type of organization providing education and training	Università degli Studi di Milano, Physics department, Milan, Italy
Title of qualification awarded	MSc Degree in Physics
Thesis	Maximum Entropy Approach For The Prediction Of Urban Mobility Patterns
Internal Supervisor	Prof. Davide Emilio Galli
External Supervisor	Prof. Vittorio Loreto
External Supervisor	Bernardo Monechi, PhD
External Supervisor	Enrico Ubaldi, PhD
Evaluation	110L/110
Number of 30L	4
	The list of the exams at the end of the CV.
Dates	December 2020 - April 2021
Name and type of organization providing education and training	University of Utrecht, Utrecht, Netherlands
Title of qualification awarded	ERC Awarded PhD Student in Computational Soft Matter
Supervisor	Prof. Marjolein Dijkstra
Dates	February 2021 - April 2021
Name and type of organization providing education and training	University of Utrecht, Utrecht, Netherlands
Title of qualification awarded	Teaching Assistant in the "Modelling and Simulations" course.
Dates	June 2021 - September 2021
Name and type of organization providing education and training	Sony Computer Science Laboratories, Paris
Title of qualification awarded	Research Assistant
Dates	October 2021 -Present
Name and type of organization providing education and training	Complexity Science Hub, Wien
Title of qualification awarded	Junior Researcher
Dates	March 2022 -Present
Name and type of organization providing education and training	University of Technology Wien
Title of qualification awarded	PhD Candidate in Computer Science

Spoken languages

Mother tongue	**Italian**
Other language(s)	English

Self-assessment *European level*[(*)]	**Understanding**		**Speaking**		**Writing**
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

[(*)] *Common European Framework of Reference* (CEF) level

Other language(s)	French

Self-assessment *European level*[(*)]	**Understanding**		**Speaking**		**Writing**
	Listening	Reading	Spoken interaction	Spoken production	
French	A2	A2	A2	A2	A2

Extra-Curricular Activities

Dates	2016 - 2018
Office held	Active Member of AISF UNIMI, local committee of the Italian Association of Physics Students (AISF)
Occupational skills covered	Team working, organisational and public speaking skills
AISF website	http://ai-sf.it

Conferences

CISF Torino 2016 - Spring 2016

Participating to the second Italian Conference of Physics Students, attending conferences and events, making acquaintances

ICPS Malta 2016 - Summer 2016

Participating to the International Conference of Physics Students, attending conferences and events, making international acquaintances

Missions

	September 2-6 2019
Conference	Lake Como school of Advanced Studies, *Model-Guided Data Science*
	January 2021
Name and type of organization providing education and training	University of Amsterdam
Conference	CECAM School "Understanding Molecular Simulations"
	January 2021
Name and type of organization providing education and training	NWO (Dutch Research Council)
Conference	"Physics@Veldhoven 2021"

Publications

Simone Daniotti, Claudia Benedetti, Matteo G.A. Paris, *Qubit systems subject to unbalanced random telegraph noise: quantum correlations, non-Markovianity and teleportation*,Eur. Phys. J. D (2018) 72: 208
https://link.springer.com/article/10.1140%2Fepjd%2Fe2018-90450-x

Computer skills

Data analysis skills: during my internship and for my university projects I improved my skills in analysing and taking statistics about the dataset I'm studying, in order to have a solid basement for research purposes.
Databases: SQL based (PostgreS,SQLite)
Experience both on Gnu/Linux based and OS X systems
Good Command in Julia: Agent-Based simulations and Data analysis.

Good command in Python, in particular using data management libraries(for example Numpy, Pandas adn Geopandas), machine learning libraries (Scikit-Learn,PyTorch, Tensorflow, Keras) and data representation libraries (Seaborn); focussing on machine learning, I've built and validated models, such as Decision Trees, Ensemble Models, SVM and Deep Neural Networks.

Good Command in C and object oriented C++: during my PhD experience at Utrecht University, I wrote Monte Carlo simulations and Advanced Sampling Techniques, giving the opportunity of improving my coding skills in those compiled languages.

Good capacity in using software development platforms, such as GitHub.

Good command of LaTeX, awk

Intermediate level Wolfram Mathematica

Good command of Molecular dynamics tools, such as VMD,Gromacs,Lammps

Good command of data analyser software ROOT

Intermediate user of Work, Excel and PowerPoint

Master Degree in Physics		
Exams in Physics Dept.	Grade	CFU
Statistical Mechanics 2	30/30	6
Computational Methods for Physics: Molecular Dynamics	29/30	6
Quantum Theory of Many Body Systems 1	30/30	6
Computational Biophysics	30/30	6
Mathematical Methods for Physics: Geometry And Groups 1	28/30	6
Protein Physics 1	30/30, with honors	6
Classical Electrodynamics	30/30	6
Astronomy 1	30/30, with honors	6
Advanced Statistical Physics	30/30, with honors	6
Theory of Quantum Computation	30/30, with honors	6
Exams in Informatics Dept.	Grade	CFU
Statistical Methods for Machine Learning	28/30	6
Bioinformatics	30/30	6
Weighted Average / Tot	29.58	120
Final Evaluation	110L	120