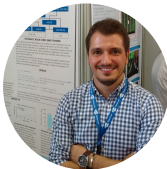


# PAOLO VIVIANI

PhD – Senior Researcher

Torino, ITALY   @ paolo.vivi@gmail.com   paoloviviani.github.io



## EDUCATION

Ph.D., Computer Science  
University of Torino  
2015 – 2019   Torino, IT  
Thesis: *Deep Learning at Scale with Nearest Neighbours Communications*.  
Supervisor: Marco Aldinucci. Funded by Noesis Solutions.

Master’s Degree, Theoretical physics  
University of Torino, 104/110  
2015   Collegio Universitario “R. Einaudi”, Torino  
Scholarship winner: “Piano Lauree Scientifiche 2008”, granted by Società Italiana di Fisica.

## EXPERIENCE

LINKS Foundation  
Senior Researcher, Advanced Computing  
2021 – present   Torino, IT

- HPC, Machine Learning and Big Data convergence – acceleration of scientific/technical applications
- Quantum algorithms and applications – discrete optimization on neutral atoms machines and quantum annealers
- ML/DL algorithms for neural signal decoding
- Funded research projects – proposals writing, technical management and execution
- ETP4HPC Working groups member

Noesis Solutions  
Research Engineer  
2015 – 2021   Novara, IT

- Machine learning methodologies for engineering modelling and design exploration
- Development of numerical code and software stack
- Supervisor of one internship
- Technical contact for funded research projects

Funded Research Projects  
See [paoloviviani.github.io/projects](https://paoloviviani.github.io/projects) for full list and details.

B-CRATOS	H2020-FET Open	2021 – ongoing
ACROSS	H2020-EuroHPC	2021 – ongoing
Lexis	H2020-ICT-11	2021 – 2022
BoSS	IMEC-ICON	2018 – 2019
Fortissimo 2	H2020-FoF project	2016 – 2018
CloudFlow	FP7-I4MS project	2016 – 2017
MACH	ITEA2	2015 – 2016

## MAIN INTERESTS

- High Performance Computing
- Machine Learning
- Quantum software and algorithms

## SKILLS

Parallel Computing  
Quantum Computing  
Machine Learning  
Research project management  
Cloud technologies

### Programming

C++  
Python  
CUDA  
Fortran  
Git

### Soft

Presentations  
Communication of results  
Formalization of requirements  
Decomposition of problems

### Tools

- Keras
- MxNet
- Pandas
- BLAS/Lapack
- MPI/OpenMP
- Dask
- PBS/Slurm
- Docker
- Qiskit
- Openstack
- Gitlab CI
- Linux
- IP Networking
- Latex

CISCO CCNA course completed in 2008.

## LANGUAGES

Italian  
English  
French