

PAOLO VIVIANI

PhD – Research Engineer

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



EDUCATION

Master's Degree in 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.

Ph.D. in Computer Science

University of Torino, Computer Science Dept.

2015 – 2019 Torino, IT

Thesis: *Deep Learning at Scale with Nearest Neighbours Communications*. Supervisor: Marco Aldinucci. Funded by Noesis Solutions.

- Co-supervisor of one M.Sc. Thesis

EXPERIENCE

Noesis Solutions

Research Engineer

April 2015 – present Novara, IT

- Development of machine learning modelling methodologies for engineering applications.
- Re-definition of the internal stack (C++, Python) for scientific computing, with focus on performance and maintainability.
- Cloud and container technologies exploitation.
- Supervisor of one internship.
- Re-designed company-wide source code management workflow.
- Technical lead for the following research projects. Non-technical tasks included presentations to European Commission reviewers and reporting activities.

Funded Research Projects

MACH – ITEA2 project

April 2015 – December 2016 itea3.org/project/mach.html

Fortissimo 2 – H2020-FoF project

February 2016 – October 2018 www.fortissimo-project.eu

CloudFlow – FP7-I4MS project

March 2016 – May 2017 www.eu-cloudflow.eu

Blockchain for online Service Security – IMEC-ICON Flemish project

March 2018 – November 2019

VaProFam – FlandersMake-ICON Flemish project

February 2019 – ongoing

DC-CDS – FlandersMake-ICON Flemish project

April 2019 – ongoing

MAIN INTERESTS

High Performance Computing

Machine Learning

Containers and Cloud technologies

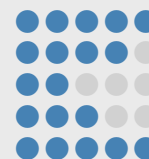
SKILLS

Parallel Computing
GPU Computing
Cloud technologies
Machine Learning



Programming

C++
Python
CUDA
Fortran
Git



Soft

Presentations
Communication of results
Formalization of requirements
Factorization of problems



Tools

- Keras
- MxNet
- Pandas
- BLAS/Lapack
- Apache Spark
- Openstack
- PBS/Slurm
- Docker
- Gitlab CI
- Linux
- IP Networking
- Latex
- Mathematica

CISCO CCNA course completed in 2008.

LANGUAGES

Italian



English



French




Publications

Other



- Four PhD schools attended
- Program Committee member, *Euromicro International Conference on Parallel, Distributed, and Network-based Processing (PDP)* for 2018 (also session chair), 2019 and 2020.
- Program Committee member, *Parallel Numerical Methods and Libraries for Heterogeneous Multi/Manycores (PDP2018 and PDP2019)*
- Program Committee member, *Artifact Evaluation, Euro-Par 2018*
- Program Committee member, *16th IEEE International Conference on Scalable Computing and Communications (ScalCom 2016)*

Avid traveller and photographer.
Former track & field athlete, now turned to playground basketball.

 paoloph.myportfolio.com

Photographer



OASIS Project

 2013  Kharga, Egypt

Archaeological expedition funded by
Fondazione Collegio delle Università
Milanesi and American University in Cairo.

Photographer

Collegio Universitario "R. Einaudi"

 2012 – 2014  Torino, Italy


Exchange student

Tauranga Boy's College

 2006  Tauranga, New Zealand


Scuba Diver

PADI Advanced Open Water Diver

 From 2004

Track and Field athlete

Javelin Throw – Regional and National competitions

 1997 – 2012



Volunteer

IAAF Athletics World Championship

 2009  Berlin, Germany

English Course

'General English Super Intensive' C1 level course at Alpha College of English

 2012  Dublin, Ireland

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(UE 2016/679)