

EDUCATION

UNIVERSITÀ DI FIRENZE

MS IN PHYSICS&ASTROPHYSICS

Oct 2020 | Florence, Italy

Final grade: 110 / 110 cum laude

UNIVERSITÀ DI FIRENZE

BS IN PHYSICS&ASTROPHYSICS

Apr 2016 | Florence, Italy

Final grade: 110 / 110 cum laude

LINKS

Github:// [zolfariot](#)

LinkedIn:// [lorenzo-zolfanelli](#)

COURSEWORK

GRADUATE

Open & Data Science Principles

Reproducibility in Data Science

Bioethics

Advanced Image Analysis

Omics Data Analysis

Flow Cytometry

UNDERGRADUATE

Complex Systems & Information Theory

Data & Document Mining

Modelling of Biomolecules

Theoretical Physics • Atomic Physics

Advanced Mathematical Methods

Cosmology • Astrophysics • Lasers

SKILLS

PROGRAMMING

Over 5000 lines:

Python • Shell • LabVIEW • JS • Matlab

Over 1000 lines:

C • C++ • PHP • Java • SQL

MOLECULAR & CELL BIOLOGY

Advanced:

Cloning • PCR • Flow Cytometry • FPLC

Autonomous:

Cell culture • Immunohistochemistry

Protein & Antibody Engineering

OPTICS & MICROSCOPY

Autonomous:

Epifluor. • Confocal • Opt. Tweezers

Integration: PID • FPGA • DDS

Familiar:

Super-resolution • TIRF

Optical system design

EXPERIENCE

ESPCI & INSTITUT PASTEUR | PHD CANDIDATE

Oct 2020 - Dec 2024 | Paris, France

- PSL University scholarship
- Project on "Single cell high-throughput measurement of cell surface receptors interactions with soluble ligands".
- Co-supervised by Jean Baudry (LCMD Lab) & Pierre Bruhns (ATP Lab).

FREE & OPEN SOURCE SOFTWARE COMMUNITY | CONTRIBUTOR

2012 - Present | Worldwide

- Contributed to and had contributions accepted in: Linux kernel • FreeBSD • OpenStreetMap • minor Python and JS projects
- Experience in: team code writing (Git) • orchestration • CI/CD

BIOPHOTONICS @ LENS | ACADEMIC INTERN

June 2019 - Oct 2020 | Sesto Fiorentino, Italy

- Developed an experimental set-up for simultaneous and time-correlated epifluorescence-TIRF-optical tweezers microscopy.

NABLAPOLO | CO-FOUNDER & DEVELOPER

June 2017 - Oct 2020 | Florence, Italy

- Non-profit carpooling platform for the Florence area.

INSTITUT PASTEUR | ACADEMIC INTERN

Oct 2018 - Apr 2019 | Paris, France

- High-throughput quantification of transcriptional activity in *D. melanogaster*
- Conceived and designed of a novel magnetogenetics tool.

QUANTUMGASES @ LENS | ACADEMIC INTERN

Dec 2015 - Apr 2016 | Sesto Fiorentino, Italy

- Optimization of spin qubit control at room temperature, on a system based on nano-engineered diamonds.

KIWI S.R.L. | INDEPENDENT DEVELOPER

Jan 2013 - May 2013 | Pisa, Italy

- Development of a novel location-based social network.
- Responsible for the Symbian OS branch at the early development phase.

CONFERENCES

EMBL MICROFLUIDICS 2022 | SELECTED SPEAKER

11-13 July 2022 | Heidelberg, Germany

Single-cell high-throughput measurement of the memory B cell immune repertoire.

EMBO ANTIBODIES & COMPLEMENT 2023 | SELECTED SPEAKER

27 June - 1 July 2023 | Girona, Spain

Microfluidics for quantitative high-throughput single B-cell affinity screening.

FREE SOFTWARE & FREE SOCIETY | ORGANIZER & SPEAKER

16 June 2015 | Florence, Italy

Talk "Impact of the Software in everyday life: the case of OpenStreetMap"

EXTRAS

ICFP PROGRAMMING CONTEST | PARTICIPANT

2014 • 2016 • 2018 | Worldwide

Best placement 28th / 200+ participants.