# Jacopo Pasqualini



#### PERSONAL DATA

PLACE AND DATE OF BIRTH: Legnago (VR), Italy | Sept. 6th 1995

ADDRESS: Padua (PD), Italy

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## PERSONAL PAGES

Github: https://github.com/jacopopasqualini

Linkedin: https://www.linkedin.com/in/jacopo-pasqualini-467066147/

#### ACADEMIC ACTIVITIES

OCT 2021 - CURRENT PhD, Physics, University of Padua

"Machine Learning and Statistical Physics for Viruses and Bacteria"

SUPERVISOR: SAMIR SUWEIS, LIPH LAB

May 2021- Aug 2021 IFOM Institute Milan (IT), Pre-PhD Internship

Project: "Quantitative characterization of metagenomic functional profiles".

SUPERVISOR: MARCO COSENTINO LAGOMARSINO.

SEP 2020 - DEC 2020 University of Turin, Bachelor degree tutor:

Informatics for physics. Supervisor: EZIO MAINA

Introduction to C programming. Supervisor: Andras Horvath

## INVITED PRESENTATIONS AT CONFERENCES

FEB 2023 Invited talk, (HFSP project: kickoff meeting) "How do ecological network dynamics

mediate the response of organisms to novel environments?"

Talk Title: "Emergent Patterns in Healthy and Diseases Gut Microbiomes"

MAR 2021 Practical Session Instructor

Master in Life Science, École Normale Supérieure Paris (FR),

Qlife Quantitative Biology Winter School: Quantitative Ecological Genomics in the Tara Ocean

MAR 2021 Practical Session Instructor, University of Udine (IT),

Systems Biology PhD Winter School

FEB 2020 Invited as Machine Learning Journal Club speaker at

"Machine Learning for Chemistry" workshop, University of Turin (IT)

### INTERNATIONAL SCHOOLS AND CONFERENCES

FEB-MAR 2022 EMBO Workshop: The Immune System of Bacteria (SISB2023),

Weizmann Institute of Science, Rehovot (IL)

FEB-MAR 2021 Spring College on the Physics of Complex Systems | (smr 3556),

Abdus Salam ICTP, Trieste (IT)

Nov 2021 Multiscale Integration in Biological Systems, 4th Course

Institut Curie, Paris (FR)

MAR 2022 PSL Qlife Winter School: Quantitative Viral Dynamics Across Scales

Ecole Noramle Superieure, Paris (FR)

#### **EDUCATION**

Sep 2020 - Apr 2021	University of Turin, Master thesis at LiPh lab, University of Padua
	"Ecology of human gut microbiome: a statistical physics perspective".
	Supervisors: Samir Suweis, Amos Maritan, Piero Fariselli
2018 - 2021	Master of Physics of Complex systems
	University of Turin, Turin, IT. Grade: 110L/110
Jun 2018 - Sep 2018	University of Pauda, Bachelor Thesis: "Cumulants calculation
	in non-equilibrium statistical mechanics"
	Supervisor: Marco Baiesi
2014 - 2018	Bachelor's Degree in Physics
	University of Padua, Padova, IT. Grade: 84/110

#### OTHER ACTIVITIES

Jun 2021 - Gen 2022 University of Toronto UofT, Project-X: Lead Mentor, University of Turin Team.

Five-month-long machine learning research competition.

Project: Unsupervised Peptide Clustering for Neoantigen Discovery.

2019 -2022 Founder Member of Machine Learning Journal Club (UniTo, Turin, IT)

https://medium.com/mljcunito

#### PROGRAMMING SKILLS

Good Knowledge: C++, PYTHON, BASH, BIONFORMATICS TOOLS

Intermediate Knowledge: LINUX SYSTEMS (UBUNTU), R, LATEX, MATHEMATICA (WOLFRAM)

Tools: Git, SnakeMake, SSH

#### WORK EXPERIENCE

SUMMER 2019 - Now Private Lessons in Programming, Mathematics, Physics

WINTER/SPRING 2016 Swim coach, Legnago Nuoto, Legnago(VR)

## LANGUAGES

ITALIAN: Mothertongue

ENGLISH: Fluent