### Curriculum Vitae

### Education

mar 2022 - Master's Degree: Physics of Complex Systems, Università Degli Studi di Torino, Torino,

apr 2025 Final 110/110 Cum Laude

Thesis Title: "Activity-Driven modeling of financial transactions networks"

sep 2013 - Bachelor's Degree: Physics and Astrophysics, Università Degli Studi di Firenze, Firenze,

dec 2021 Final: 96/110

Thesis Title: "Minority Game: a simplified market model"

## Research Experience

mar 2024 - Master Thesis, CENTAI Institute, Torino

apr 2025 O Conducted research on financial transaction networks trough data driven generative models.

apr 2025 - Paper contribution, CENTAI Institute, Torino

ongoing O Contributing to research paper.

## Work Experience

nov 2024 **Teaching Assistant**, King's College London (LISS DTP)

O Teaching assistant in "Social Network Analysis" seminar

sep 2015 - Museum Guide, "Giardino di Archimede", Firenze

mar 2020 O Educational tours dedicated to physics and mathematics

may 2014 - Sales Agent, MASTER AGENT, Empoli

sep 2015 O Sale of gas, electricity, water and telephone supplies

#### Technical Skills

Programming O Python (Proficient)

languages  $\circ$  C/C++ (Intermediate)

Mojo, MatLab, Netlogo, Gama (Basic)

Python O Pandas, NumPy, Matplotlib, Mesa (Proficient)

Packages O Scipy, Seaborn, Statsmodels (Intermediate)

TensorFlow, PyTorch, Scikit-learn, Sympy (Basic)

## Languages

Italian Native

English Fluent

Spanish Fluent

French Beginner

## Master degree in "Physics of Complex Systems"

Exam	CFU	Grade
Numerical Algorithms for Physics	6	30L
Professional Aspects of Applied Physics	3	Pass
Data Mining: Statistical Modeling and Machine Learning	6	25
Econophysics	6	30
Elements of Game Theory and Network Theory	6	30
Condensed Matter Physics	6	30
Laboratory of Advanced Modeling Techniques: Multi-Agent Systems (MAS)	6	30
Nonlinear Waves and Turbulence	6	30
Neural Networks	6	30
Seminar on Scientific Communication	1	Pass
Complex Systems for Climate Physics	6	30L
Statistical Mechanics B	6	28
Stochastic Processes for Physics	6	30L
Dynamical Systems	7	28
ntermediate Graduation Exam	22	Pass
Final Exam	24	Pass

# Bachelor degree in "Physics and Astrophysics"

Exam	CFU	Grade
Mathematical Analysis I	12	24
Physics I	12	24
Geometry	12	22
Computer Science	6	26
English	3	Pass
Physics Laboratory I	9	19
Chemistry (Erasmus)	6	20
Mathematical Analysis II	9	21
Astronomy	6	25
Electromagnetism (Erasmus)	8	20
Physics II	15	26
Fluids/Thermodynamics/Statistics	9	25
History of Science (Erasmus)	5	29
Optics Laboratory	6	27
Analytical Mechanics	6	27
Physics of Complex Systems	6	24
Introduction to Astrophysics	6	26
Introduction to Matter Physics	6	24
Introduction to Nuclear and Subnuclear Physics	6	30
Physics Laboratory III	6	24
Quantum Mechanics	12	25
Mathematical Methods	6	23
Computational Techniques for Astrophysics	3	Pass
Final Exam	6	Pass