# VASILIS VALATSOS

# Curriculum Vitæ

Turin, Italy © +39-327-754-0583 ⊠ valatsosvasilis@gmail.org 🗓 www.valatsos.gr in Vasilis Valatsos

## Experience

2022-present

Alumni Database Manager, Students For Liberty,

Skills: Web Scraping, Database Management, Data Analysis, SalesForce, BitBucket

#### Education

2021-present

M.Sc. Statistics and Data Science, Università degli Studi di Torino, Torino, Italy

2014-2021

B.Sc. Physics, National and Kapodistrian University of Athens, Athens, Greece

#### Theses

#### Master's Thesis

2023

PneumaRL - A Game Platform to Train Single and Multi Agent Reinforcement Learning Algorithms, Università degli Studi di Torino, Supervisor: Roberto Esposito | Co-Supervisor: Mirko Polato,

Code available upon request. (Thesis in Progress)

#### Bachelor's Thesis

2021

The One-Dimensional Heisenberg Model, RG Methods and Numerical Simulation of the SDRG Process, National and Kapodistrian University of Athens, Supervisor: Professor Aris L. Moustakas, Code available upon request.

# Programming Skills

**Python:**, Web Scraping, PyTorch, Django, Neural MMO

AI Algorithms:, Image and Video Classification, Q-Learning, Policy Optimization

Web Development:, ReactJS, HUGO, HTML5, Bootstrap

Databases:, PostgreSQL, Salesforce

## Projects

Super Mario Network, Implementation of a DDQN to play SMB1 for the NES, as part of my thesis, 2023 Code available upon request.

Taxation Through Coercion, Implementation of the paper 'Analysing Tax Evasion Dynamics via the Ising 2023 Model'. Project for the course 'Simulation Models for Economics', Code available upon request.

2022 Prehistoric Human Dispersion: The Exodus from Africa, Project for the course 'Statistical Machine Learning',

Code available upon request.

**The Black-Scholes Model for financial applications**, *Project for the course 'Computer Science with Python'*, 2022 Code available upon request.

# Workshops & Conferences

June 2022 Machine Learning Crash Course, Università di Genova, organised by MaLGa - Machine Learning Genoa Center.

Eighth Summer School in Operator Theory, National and Kapodistrian University of Athens, organised by July 2019 Emeritus Professor A. Katavolos.

December 2018 Xmas Theoretical Physics Workshop @ Athens 2018, National and Kapodistrian University of Athens, organized by Professor K. Sfetsos and Associate Professor V. Spanos.

December 2017 Xmas Theoretical Physics Workshop @ Athens 2017, National and Kapodistrian University of Athens, organized by Professor K. Sfetsos and Associate Professor V. Spanos.

### Presentations

June 2019 **Random Operators – Anderson Localisation**, *National and Kapodistrian University of Athens*, Presentation for the course Stochastic Processes in Physics.

## Seminars & Colloquia

March 2022 **Machine Learning from a Mathematical View Point: A Gentle Introduction**, *Università degli Studi di Torino*, Ernesto De Vito (Università di Genova), organized by UniTo.

December 2017 **Colloquium in Honour of Fokion Hadjioannou**, *National and Kapodistrian University of Athens*, organized by Professor P.J. Ioannou and Associate Professor T. Apostolatos.

December 2017 Lectures on Theoretical Physics 2017, National Technical University of Athens, F. Farakos (Leuven U.) – An Introduction to Supergravity, organized by Konstantinos N. Anagnostopoulos, Nikos Irges, Alexandros Kehagias, Georgios Koutsoumbas.

## Languages

Native Greek
Fluent English
Basic Italian

Mastery of Proficiency (C2 level, Michigan ECPE)