

# Riccardo Invernizzi

M.S. IN MATHEMATICS

☎ (+39) 393 50 72 748 | ✉ nidadoni@gmail.com

## Education

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### University of Pavia

B.S. IN MATHEMATICS

- Final Score: **110/110 Cum Laude**
- Thesis: "Asymptotic results on Goldbach's Conjecture"
- Supervisor: Prof. Alberto Canonaco

*Pavia (IT)*  
Sep. 2017 - Sep. 2020

### University of Pavia

M.S. IN MATHEMATICS

- Final Score: **110/110 Cum Laude**
- Thesis: "On the automorphism group of certain radical rings with application to cryptography"
- Supervisor: Prof. Alberto Canonaco
- Co-supervisor: Prof. Marco Calderini

*Pavia (IT)*  
Sep. 2020 - Sep. 2022

### Institute of Advanced Studies IUSS

SECOND LEVEL MASTER (CMU2)

- Conferred a place through national exam-based competition (9 students per class)
- Attended high level interdisciplinary courses
- GPA: **30.4/30**
- Expected graduation: May 2022

*Pavia (IT)*  
Sep. 2020 - Present

### Collegio ghislieri

ALUMNO

- Recognized by the Italian Government as an institution of high cultural qualification
- Conferred a place through national exam-based competition
- Maintained yearly merit requirements
- Attended over 70 hours of certified extracurricular activities per year

*Pavia (IT)*  
Sep. 2017 - Sep. 2022

## Research & Teaching

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### KU Leuven

RESEARCH INTERNSHIP

- Member of the group led by Prof. Fatemeh Mohammadi
- Tutored by Dr. Daniele Taufer
- Currently studying the group structures of Elliptic Curves over finite rings

*Leuven (BE)*  
Oct 2022 - Present

### Technische Universität München

RESEARCH INTERNSHIP

- Member of the group led by Prof. Antonia Wachter-Zeh
- Tutored by Prof. Violetta Weger
- Studied Minimal Lee-Metric Codes over rings and applications

*Munich (DE)*  
Aug 2022 - Sep 2022

### PRIN 2017 "Governance through big data: challenges for European Law"

RESEARCH POSITION AS DATA SCIENTIST

- Member of an interdisciplinary group of legal experts and data scientists
- Funded by the Italian Minister of Research as Project of National Relevance (PRIN)
- Project started in 2020 supervised by Prof. Fabiana di Porto
- Implemented NLP algorithms to analyze legal documents and automate decision-making processes

*Lecce (IT)*  
Sep 2020 - Present

### Collegio Ghislieri

PYTHON COURSE INSTRUCTOR

- Taught an annual course on Python
- Covered many topics, from basics to statistical and biomedical applications

*Pavia (IT)*  
Feb 2020 - Present

## Publications

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### 'I See Something You Don't See'. A Computational Analysis of the DSA and the DMA

DI PORTO, F., GROTE, T., VOLPI, G. & INVERNIZZI, R. - STANFORD COMPUTATIONAL ANTITRUST (2021), VOL 6, 84-116

### A.I. and Competition Law. A Computational Analysis of the DMA and DSA

DI PORTO, F., INVERNIZZI, R., GROTE, T., & VOLPI, G. - CONCURRENCES, 3 (2021)

## Honors & Awards

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### ACADEMIC

- 2020 **Felice Casorati Scholarship**, Best Math students - Funded amount: 12.000€
- 2020 **IUSS Scholarship**, Selected students - Funded amount: 2.000€
- 2022 **Carlo Bernasconi Award**, Best research project - Funded amount: 1.000€

University of Pavia  
IUSS Pavia  
Collegio Ghislieri

### MOBILITY

- 2022 **Student Exchange Program with Maximilianeum College**, for research activity at TUM (DE)
- 2022 **Traineeship + Mobility Program**, for research activity at KU Leuven (BE)
- 2022 **Premier Mobility Program**, for research activity at KU Leuven (BE)

Collegio Ghislieri  
University of Pavia  
IUSS Pavia

## Working Experience

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### DAAT Consulting

DATA ANALYST

- Collaborated with DAAT Consulting on an R&D project
- Forecasted data about soccer players through machine learning techniques

Milano (IT)

Mar 2020 - Jun 2020

### Italian Red Cross

VOLUNTEER - CERTIFIED RESCUER

- Received 160h of specific training for BLS, trauma and emergency ambulance service
- Attended to maxi-emergency simulations
- Earned Rescuer abilitation from the Italian Emergency System through theoretical and practical exam
- Volunteered on emergency ambulance service also during Covid19 pandemic

Pavia (IT)

Dic 2019 - Present

### JECO - Junior Enterprise Consulting

IT MANAGER

- Led the association's working IT team

Pavia (IT)

Feb 2019 - Oct 2020

### Tasca Milano S.r.l.

FRONT-END DEVELOPER

- Redesigned the company's website implementing an e-commerce framework

Milano (IT)

Jan 2019 - Jul 2019

### QuattroZeta S.r.l.

BACK-END DEVELOPER

- Developed and maintained a management software with CMV framework and MySQL database

Novara (IT)

Sep 2017 - Dec 2018

## Language Skills

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- Italian** Mother tongue
- English** Fluent (IELTS Certificate, Level C1 - Overall Grade 8.0)
- German** Elementary

## Programming Skills

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- Generic Purpose** Python, C/C++, Julia,
- Mathematical** numPy, Matlab, Magma, Sage
- Machine Learning** scikit-learn, keras, pyTorch
- DevOps Platforms** GCC, AWS, Docker, git
- Web Development** PHP, Js, MySQL, WordPress
- InfoSec** Ghidra, gdb, BurpSuite