



Federico D'Onofrio

● EDUCATION AND TRAINING

11/2020 – CURRENT – Rome, Italy

PHD PROGRAM IN AUTOMATIC CONTROL, BIOENGINEERING AND OPERATIONS RESEARCH (ABRO) – Sapienza University of Rome

Mixed Integer Programming, Combinatorial Optimization, Interpretable Machine Learning, Game Theory

Address Rome, Italy | **Field of study** Operations Research

1/2022 – 7/2022 – New York City (NY), United States

VISITING RESEARCHER – Columbia University

Research activity on Incremental Knapsack problems with Submodular Profits with prof. Yuri Faenza

Address New York City (NY), United States

9/2018 – 10/2020 – Rome, Italy

MSC IN MANAGEMENT ENGINEERING – Sapienza University of Rome

Optimization Methods for Machine Learning, Business Process Management, Combinatorial Optimization, Probabilistic Models for Finance, Games and Equilibria.

Address Rome, Italy | **Field of study** Business Intelligence and Analytics | **Final grade** 110/110 cum laude |

Thesis Polyhedral Methods for Stable Set Congestion Games

2/2020 – 4/2020 – Madison (WI), United States

VISITING SCHOLAR – University of Wisconsin-Madison

Research activity for my Master's thesis under the supervision of professor Carla Michini

Address Madison (WI), United States

9/2015 – 10/2018 – Rome, Italy

BSC IN MANAGEMENT ENGINEERING – Sapienza University of Rome

Statistics, Linear Programming, Combinatorial Optimization, Production Systems and Supply Chain Management

Address Rome, Italy | **Final grade** 110/110 cum laude

9/2010 – 6/2015 – Rome, Italy

CLASSICAL HIGH SCHOOL – Liceo Classico-Linguistico Tito Lucrezio Caro

Address Rome, Italy | **Final grade** 100/100

● PUBLICATIONS

Margin Optimal Classification Trees

2022

F.D'Onofrio, G. Grani, M. Monaci, L. Palagi

Under review

Stable Set Congestion Games on Perfect Graphs

2022
F. D'Onofrio, C. Michini
Under review

● CONFERENCES AND SEMINARS

5/2022 – New Brunswick (NJ), United States
MIP 2022 - Mixed Integer Programming Workshop

Poster session presentation: *Margin Optimal Classification Trees*

9/2021
ODS 2021 - International Conference on Optimization and Decision Science

Conference presentation: *Feature Selection in the diagnosis of complex diseases: an SVM Mixed Integer approach versus a SHAP driven model*

9/2021 – Firenze, Italy
ODS 2022 - International Conference on Optimization and Decision Science

Conference presentation: *Margin Optimal Classification Trees*

5/2021
MIP 2021 - Mixed Integer Programming Workshop

Poster presentation: *Stable Set Congestion Games on Chordal Graphs*

5/2021
IPCO 2021 - Conference on Integer Programming and Combinatorial Optimization

Poster presentation: *Stable Set Congestion Games on Chordal Graphs*

● TEACHING ACTIVITIES

9/2022 – 2/2023
Teaching Assistant

Teaching Assistant for the “Analisi Matematica” course of the BsC in Management Engineering at Sapienza Università di Roma (A.Y. 2022/2023)

9/2021 – 2/2022
Teaching assistant

Teaching Assistant for the “Analisi Matematica” course of the BsC in Management Engineering at Sapienza Università di Roma (A.Y. 2021/2022)

HONOURS AND AWARDS

9/2021

International research mobility grant – Sapienza University of Rome

9/2019

International thesis scholarship – Sapienza University of Rome

9/2015

Merit scholarship – Sapienza University of Rome

DIGITAL SKILLS

My Digital Skills

Python | Microsoft Office | LaTeX | Gurobi | IBM CPLEX | Bizagi | AMPL

Python Libraries

Numpy | Pandas | Matplotlib | Scikit-learn

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1
FRENCH	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user
