Daniele Patria

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● EDUCATION AND TRAINING

31/10/2021 – CURRENT – Rome, Italy
ABRO PHD, CURRICULUM: OPERATIONS RESEARCH – Department of Computer, Control and management Engineering, Sapienza University of Rome

Address Via Ariosto, 25, Rome, Italy |

Website https://phd.uniroma1.it/web/AUTOMATIC-CONTROL,-BIOENGINEERING-AND-OPERATIONS-RESEARCH_nD3553_EN.aspx

08/2019 – 18/07/2021 – Rome, Italy
MASTER'S DEGREE IN MANAGEMENT ENGINEERING – Sapienza, University of Rome

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

Thesis Using the Frontier Partitioner Algorithm to select pareto-optimal solutions of portfolio optimizati

08/2020 – 02/2021
ERASMUS+, MASTER'S DEGREE – FH Salzburg

Website https://www.fh-salzburg.ac.at/en/

08/2016 – 23/10/2019 – Latina, Italy
BACHELOR'S DEGREE IN INFORMATION ENGINEERING – Sapienza, University of Rome

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

Thesis A gray-box approach for the curriculum learning problem

08/2011 – 07/2016 – Latina, Italy
SCIENTIFIC HIGH SCHOOL DEGREE – Liceo scientifico G.B. Grassi

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

11/01/2015
FIRST CERTIFICATE IN ENGLISH (B2) – CAMBRIDGE ENGLISH Lenguage Assessment

07/02/2022 – 15/02/2022
COURSE ON SCIENTIFIC AND TECHNICAL WRITING FOR PHD STUDENTS – Sapienza, University of Rome

20/06/2022 – 24/06/2022 – Germany
INVITATION AT TU ILMENAU FROM PROF. GABRIELE EICHFELDER FOR JOINT WORK ON RESEARCH PROJECT – TU Ilmenau

Address Germany

03/07/2022 – 09/07/2022 – Italy
OBA 2022 - SUMMER SCHOOL ON OPTIMIZATION, BIG DATA AND APPLICATIONS

Address Italy

● LANGUAGE SKILLS

Mother tongue(s):   **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	B2	C1	B2	B2
GERMAN	A1	A1	A1	A1	A1
SPANISH	A1	A1	A1	A1	A1

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

● PUBLICATIONS

Marianna De Santis, Gabriele Eichfelder, Daniele Patria, On the exactness of the ε-constraint method for biobjective nonlinear integer programming, Operations Research Letters, Volume 50, Issue 3, 2022

https://www.sciencedirect.com/science/article/pii/S0167637722000554?dgcid=author – 2022
The ε-constraint method is a well-known scalarization technique used for multiobjective optimization. We explore how to properly define the step size parameter of the method in order to guarantee its exactness when dealing with biobjective nonlinear integer problems. Under specific assumptions, we prove that the number of subproblems that the method needs to address to detect the complete Pareto front is finite. We report numerical results on portfolio optimization instances built on real-world data and show a comparison with an existing criterion space algorithm.

● CONFERENCES AND SEMINARS

13/09/2021 – Rome
ODS 2021 - Optimization in Artificial Intelligence and Data Sciences

Talk title: "Using the Frontier Partitioner Algorithm to detect pareto-optimal solutions of portfolio optimization problems"
http://www.airoconference.it/ods2021/

22/02/2022 – 24/02/2022 – Rome
6th AIRO Youg workshop

Talk title: "On the exactness of the epsilon-constraint method for bi-objective integer nonlinear programming"
https://ayw2022.uniroma3.it/

20/06/2022 – Ilmenau
Seminar held at TU Ilmenau during research stay

Seminar title: "On the exactness of the epsilon-constraint method for bi-objective integer nonlinear programming"

30/08/2022 – 02/09/2022 – Florence
ODS 2022 - International Conference on Optimization and Decision Science

Talk title: "Using dual bounds for multiobjective mixed integer quadratic programming"
http://www.airoconference.it/ods2022/

23/07/2022 – 02/08/2022 – Lisbon
19th EUROPT Workshop on Advances in Continuos Optimization + Sumer School

Talk title: "Using dual bounds for multiobjective mixed integer quadratic programming"
https://sites.fct.unl.pt/europt2022/home

WORK EXPERIENCE

01/07/2022 – 31/07/2022 – Italy
CASUAL COOPERATION AGREEMENT – DEÌX

Casual cooperation agreement for the project "optimized smart working".

01/03/2022 – 30/05/2022 – Rome, Italy
TEACHING TUTOR - OPERATIONS REASEARCH LABORATORY – SAPIENZA, UNIVERSITY OF ROME

DIGITAL SKILLS

My Digital Skills

Python │ C │ MATLAB │ Gurobi Optimization │ LaTeX │ Linux │ Ubuntu

HOBBIES AND INTERESTS

AGESCI Italian Scout movement

I've been part of the Italian Scout association AGESCI for more than 10 years. This huge experience helped me in building strong relational and team working skills. In addition, I've joined important national and international events during which I encountered many different cultures; this allowed me to get a wider view on the world.

Guitar playing

I am a music enthusiast and I've been studying guitar for several years. I've also obtained two certifications in this matter: London College of Music, Electric Guitar, Level 5 and Level 7.