Daniele Patria

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, 00185, 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

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

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

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

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

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

WORK EXPERIENCE

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

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

Website https://www.deixsrl.com

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

Operations research laboratiry at the BSc in management engineering

09/2022 – 02/2023 Rome, Italy
TEACHING TUTOR - GEOMETRY SAPIENZA, UNIVERSITY OF ROME

Geometry course at the BSc in management engineering

09/2022 – 02/2023 Rome, Italy
TEACHING TUTOR - MATHEMATICS COMPLEMENTS SAPIENZA, UNIVERSITY OF ROME

Mathematics complements course at the BSc in management engineering

DIGITAL SKILLS

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

ADDITIONAL INFORMATION

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

– 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"

Link http://www.airoconference.it/ods2021/

22/02/2022 – 24/02/2022 – Rome
6th AIRO Youg workshop Talk title: "On the exacteness of the epsilon-constraint method for bi-objective integer nonlinear programming"

Link https://ayw2022.uniroma3.it/

20/06/2022 – Ilmenau
Seminar held at TU Ilmenau during research stay Seminar title: "On the exacteness 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"

Link 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"

Link https://sites.fct.unl.pt/europt2022/home

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.