| Prot. n. 0000006 del 07/01 | /2022 - [UO R: IMP00 0020 - Classif. VII/16] |
|----------------------------|---|
| Daniele Patria | |
| Date of birth: | Nationality: |
| | |

EDUCATION AND TRAINING

01/11/2021 – CURRENT – Rome, Italy PHD IN OPERATIONS RESEARCH – Sapienza, University of Rome

09/2019 – 19/07/2021 – Rome, Italy MASTER DEGREE IN MANAGEMENT ENGINEERING – Sapienza, University of Rome

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

09/2020 - 02/2021 ERASMUS+ - FH Salzburg

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

09/2016 – 24/10/2019 – Latina, Italy BACHELOR DEGREE IN INFORMATION ENGINEERING – Sapienza, University of Rome

Thesis: A gray-box approach for the curriculum learning problem

09/2011 – 07/2016 – Latina, Italy SCIENTIFIC HIGH SCHOOL DEGREE – Liceo scientifico G.B. Grassi

12/01/2015 FIRST CERTIFICATE IN ENGLISH (B2) – CAMBRIDGE ENGLISH Lenguage Assessment

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

DIGITAL SKILLS

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

CONFERENCES AND SEMINARS

14/09/2021 - Rome

Using the Frontier Partitioner Algorithm to select pareto-optimal solutions of portfolio optimization problems

In this talk, we deal with portfolio optimization problems considering the classical bi-objective model where we aim at maximizing the expected returns and minimizing the covariances of different eurostoxx financial assets, simultaneously. In the instances we consider, both the expected returns and the covariances are computed by averaging the data obtained during a timespan of 264 weeks (from 10-Mar-2003 to 24-Mar-2008 with one observation for each week). The variables are constrained to be integer so that we end up with a bi-objective integer nonlinear model that is addressed by a criterion space search algorithm, the Frontier Partitioner Algorithm (FPA). A comparison between FPA and the well-known epsilon-constraint method is shown considering instances of different sizes in terms of the number of assets taken into account.

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

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.

