

Dimitri Thomopoulos

Department of Energy, Systems, Territory and Constructions Engineering (DESTEC)
University of Pisa
Largo Lucio Lazzarino 1
56122 Pisa
ITALY

PERSONAL INFORMATION

Gender: Male
Born on: 11/10/1987
Citizenship: Italian
E-mail: dimitri.thomopoulos@unipi.it

CURRENT POSITION

from August 2023 to date: *Assistant Professor,*
Settore concorsuale 09/E1 Elettrotecnica,
DESTEC - University of Pisa, Pisa, ITALY.

PAST POSITIONS

from December 2018 to July 2023: *Research Fellow,*
Settore concorsuale 09/E1 Elettrotecnica,
DESTEC - University of Pisa, Pisa, ITALY.

from February 2017 to November 2018: *Post-doctoral Research Fellow,* Operations Research,
LIX CNRS - École Polytechnique, Palaiseau, France.

from January 2016 to December 2016: *Post-doctoral Research Fellow,* Operations Research,
Dipartimento di Ingegneria dell'Energia Elettrica
e dell'Informazione "Guglielmo Marconi" (DEI) -
University of Bologna, Bologna.

from September 2013 to December 2013: *Visiting PhD student,*
Singapore University of Technology and Design (SUTD),
Established in collaboration with
Massachusetts Institute of Technology (MIT),
Singapore.

EDUCATION

- March 2018: *Qualification as Maitre de Conférences*,
Scientific qualification required for the position of “Maitre de Conférences” equivalent to Assistant Professor.
- May 2016: *Ph.D.*, Automatic Control Systems and Operations Research
Obtained at DEI, University of Bologna, Bologna
Thesis: “Models and Solutions of Resource Allocation Problems based on Integer Linear and Nonlinear Programming”
Advisor: Professor Enrico Malaguti
Co-Advisor: Professor Andrea Lodi.
- July 2012: *Engineering License*, Industrial Engineering.
- March 2012: *Master of Engineering*, Industrial and Management Engineering
Alma Mater Studiorum - University of Bologna, Bologna
With grades: 110/110
Thesis: “Exact Algorithms for Job Shop Scheduling: Mathematical Programming Approaches”
Advisor: Professor Andrea Lodi.
Co-Advisors: Professor Alberto Caprara and Professor Enrico Malaguti.
- October 2009: *Bachelor of Engineering*, Industrial and Management Engineering
Alma Mater Studiorum - University of Bologna, Bologna
Thesis: “Optimization and Control of Urban Public Transport Service”
Advisor: Professor Andrea Lodi.
Co-Advisor: Professor Enrico Malaguti.
- July 2006: *High School Diploma*
Scientific High School A.B.Sabin, Bologna
With grades: 100/100.

PROFESSIONAL EXPERIENCE

- from February 2023 to July 2023: *PON Researcher* in artificial intelligence approaches for forecasts in the electrical and energy field, for i-EM S.r.l.
- from December 2022 to July 2023: *Consultant* in artificial intelligence approaches for image recognition, for GANIGA Innovation S.r.l.

TEACHING ACTIVITIES

- **A.Y. 2023/2024**
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Civil Engineering, University of Pisa. 3 CFU.
 - Lead Instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Techniques for Mechanics and Production, University of Pisa. 6 CFU.
 - Lead Co-instructor of “Electrical and electronic laboratory (Laboratorio elettrico ed elettronico)”, for the Bachelor’s degree course in Techniques for Mechanics and Production, University of Pisa. 6 CFU.
- **A.Y. 2022/2023**
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Civil Engineering, University of Pisa. 3 CFU.
 - Co-instructor of “Electrical engineering and electric drives (Elettrotecnica ed azionamenti elettrici)” (SSD ING-IND/31), for the Bachelor’s degree course in Mechanical Engineering, University of Pisa. 3 CFU.
- **A.Y. 2021/2022**
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Civil Engineering, University of Pisa. 1 CFU.
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Industrial and Management Engineering, University of Pisa. 3 CFU.
 - Co-instructor of “Electrical engineering and electric drives (Elettrotecnica ed azionamenti elettrici)” (SSD ING-IND/31), for the Bachelor’s degree course in Mechanical Engineering, University of Pisa. 1 CFU.
 - Co-instructor of “Principles of Electrical Engineering (Principi di Ingegneria Elettrica)” (SSD ING-IND/31), for the Bachelor’s degree course in Energy Engineering, University of Pisa. 1 CFU.
- **A.Y. 2020/2021**
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Industrial and Management Engineering, University of Pisa. 3 CFU.
 - Co-instructor of “Electrical engineering and electric drives (Elettrotecnica ed azionamenti elettrici)” (SSD ING-IND/31), for the Bachelor’s degree course in Mechanical Engineering, University of Pisa. 2 CFU.
 - Co-instructor of “Principles of Electrical Engineering (Principi di Ingegneria Elettrica)” (SSD ING-IND/31), for the Bachelor’s degree course in Energy Engineering, University of Pisa. 1 CFU.
- **A.Y. 2019/2020**
 - Co-instructor of “Electrical Engineering (Elettrotecnica)” (SSD ING-IND/31), for the Bachelor’s degree course in Industrial and Management Engineering, University of Pisa. 3 CFU.
 - Co-instructor of “Electrical engineering and electric drives (Elettrotecnica ed azionamenti elettrici)” (SSD ING-IND/31), for the Bachelor’s degree course in Mechanical Engineering, University of Pisa. 3 CFU.
- **A.Y. 2017/2018**
 - Teaching Assistant of INF442 - Traitement des données massives (Processing of Big Data), École Polytechnique, Palaiseau.
- **A.Y. 2016/2017**
 - Teaching Assistant of “Algorithms for Decision Making M”, in English, for the Master’s degree course in Industrial and Management Engineering, University of Bologna.

- **A.Y. 2015/2016**
 - Teaching Assistant of “Foundations of Operations Research T-A (Fondamenti di Ricerca Operativa T-A)”, for the Bachelor’s degree course in Industrial and Management Engineering, University of Bologna.
 - Teaching Assistant of “Algorithms for Decision Making M”, in English, for the Master’s degree course in in Industrial and Management Engineering, University of Bologna.
- **A.Y. 2014/2015**
 - Teaching Assistant of “Foundations of Operations Research T-A (Fondamenti di Ricerca Operativa T-A)”, for the Bachelor’s degree course in Industrial and Management Engineering, University of Bologna.
 - Teaching Assistant of “Algorithms for Decision Making M”, in English, for the Master’s degree course in in Industrial and Management Engineering, University of Bologna.
- **A.Y. 2013/2014**
 - Teaching Assistant of “Optimization”, SUTD Singapore University of Technology and Design.

COORDINATOR AND/OR MEMBER OF EXAMINATION BOARDS

- Coordinator of the Double Degree Program for the Master’s Degree in Management Engineering (Ingegneria Magistrale Gestionale) at the University of Pisa, Italy, and the Master’s Degree Program MSc Engineering Management of Manufacturing Systems at Cranfield University, United Kingdom. A.Y.:
 - **2023/2024**,
 - **2022/2023**,
 - **2021/2022**,
 - **2020/2021**,
 - **2019/2020**.
- Member of the examination committee for the verification of proficiency in the English language for admission to the Master’s degree course in Industrial and Management Engineering, University of Pisa. A.Y.:
 - **2021/2022**,
 - **2020/2021**,
 - **2019/2020**.
- Expert member in Operations Research in the “State Examination Board for the qualification to practice as an Engineer”, University of Bologna. A.Y.:
 - **2015/2016**,
 - **2014/2015**,
 - **2013/2014**.
- Member of the Bachelor’s and Master’s degree examination board in “Industrial and Management Engineering (Ingegneria Gestionale)”, University of Pisa. A.Y.:
 - **2021/2022**,
 - **2020/2021**,
 - **2019/2020**.
- Member of the doctoral committee, University of Pisa. A.Y.:

- **2021/2022**,
- **2020/2021**.
- Evaluator of doctoral thesis, University of Bologna. A.Y.:
 - **2023/2024**.

STUDENT SUPERVISION ACTIVITIES

- Supervisor of 1 student in Curricular Internship in Master of Engineering in Artificial Intelligence and Data Engineering, University of Pisa.
- Supervisor of Bachelor's theses, University of Bologna.

SCIENTIFIC AND RESEARCH ACTIVITY

Main Research Topics

The main research topics addressed to date or currently under development are grouped into the following 3 macro-themes:

- Optimal management and sizing of renewable energy communities to promote local production and consumption of renewable energy in support of the decarbonization of the energy system [19.J].
The main activity has been the development of a global optimization algorithm, which addresses the problem of management and sizing of renewable energy communities on various aspects and levels. It is based on a multi-objective formulation that integrates economic, environmental, and social aspects, and among the most innovative elements it presents integration with social aspects, such as the preferences of individual community users in terms of habits and best practices [17.J]. Further integrations include those between thermal and electrical aspects. Corresponding projects are under review. Finally, also relevant to this theme, was the development of some standard formats for processing renewable energy community data [18.J].
- Artificial intelligence approaches for energy-related forecasting.
The main approaches used are deep neural network approaches with autoencoders, or hybrids between recursive networks and neural networks. Among the forecasts addressed are those of load at different levels, i.e., local, regional, and market area for i-EM S.r.l. Other forecasts include those of production from renewable sources such as wind, photovoltaic, and hydro for a call from Terna S.p.A. Finally, further forecasts are those of failures of energy plants and in particular of photovoltaic plants, for example through the use of self-organizing maps [10.J]. Some of these projects are in the finalization or review phase.
- Optimization of energy problems, electrical components, electrical machinery, and various optimization techniques.
Among the main energy problems optimized are hydroelectric problems [20.J] and in particular hydro unit commitment problems solved through a graph formulation [3.J], [2.C], cascade formulation [13.J], or stochastic approach with chance constraint formulation [15.J].
Other optimized renewable sources are wind and photovoltaic plants, studying the optimal location of such plants in the Italian territory [5.J] or optimal decentralization strategies for wind plants only [9.J], [3.C], [4.C].
Another class of optimization problems is topological problems to optimize magnetic fields through hybrids with autoencoders [4.J], surrogate models to size ferromagnetic components of electrical machines in order to maximize torque [1.C],[7.J], or deep learning approaches used for the resolution of direct and inverse problems of electromagnetic applications [12.J], [14.J], [16.J].
Further optimizations have addressed smart building applications with particular attention to air quality, obtained through integrations of physical measurement devices and detection algorithms [11.J] or applications to electric vehicles (the latter still in the finalization phase).
Finally, various other optimization techniques have been developed, applicable to different problems, based on column generation or decomposition [1.J], [2.J] or based on disjunctive cuts for solving non-convex problems [6.J].

Association with research institutions and professional societies

- IEEE Member (Member of Institute of Electrical and Electronics Engineers) from 2020 to present.
- Member of the Interdepartmental Research Center on Energy for Sustainable Development (CIRESS) at University of Pisa from 2022 to present.

Organizational activities

from October 2022 to date: *Member of the Organizing Committee of the Conference MIPcc23 The MIP Workshop 2023 Computational Competition, as an expert in hydroelectric plant optimization.*

Participation in projects

- PRA 2020-2021 - AUTENS. Financed under the competitive call for research projects from the University of Pisa. The AUTENS project (Sustainable Energy Autarky) aimed to identify possible solutions for the complete self-sufficiency of Energy Communities. To this end, the project developed innovative methods to optimize the synergy of electrical and thermal systems, powered only by locally produced renewable sources, including the integration of ICT tools and artificial intelligence. The goal was to examine situations where it is not possible, or not sustainable, to use the traditional electrical grid, and therefore where an Energy Community must rely solely on renewable energy produced on-site (e.g., solar, wind, geothermal, or biomass energy).
- RE-START TOSCANA (Safe re-opening post-COVID: Environmental monitoring and innovative organizational models integrated into the TUSCANY System). Funded under the competitive call for research projects from the University of Tuscany. The project aims to provide guidance for the safe reopening of numerous public and commercial establishments.
- PRA 2022-2023 - Active and passive methods for reducing the use of fossil energy in civil and industrial sectors. Financed under the competitive call for research projects from the University of Pisa.

Participation in calls for proposals and funding

- Winner of the DESTEC Youth Fund (Fondo Giovani DESTEC) grant for co-financing research activities within the institution, July 2019.
- Participation in drafting a proposal for the HORIZON-CL5-2022-D4-01-03 call on smart solutions to increase energy performance in buildings, not funded but ranked fifth out of 40, December 2022.

Reviews

- Examiner of projects for the National Agency for Research and Development of Chile (ANID), in the calls “Programas Regionales STIC-AmSud, MATH-AmSud y CLIMAT-AmSud 2023”.
- Reviewer for journals such as IEEE Access, Alexandria Engineering Journal, Annals of Operations Research, Applied Mathematical Modelling, Applied Sciences, Asia-Pacific Journal of Operational Research, Axioms, Computers & Industrial, Computers and Operations Research, Electronics, Energies, Energy Systems, Engineering Optimization, European Journal of Operational Research, Flexible Services and Manufacturing Journal, Journal of scheduling, Journal of the Operational Research Society, Management Science, MPC, Omega, Operations Research and Decisions, Sensors, Sustainability, Transaction on Magnetics.
- Reviewer for conference articles such as ACC 2020, ESA 2014, ICORES 2017, IPCO 2020.

Presentations at conferences or seminars or posters

The presentations below were conducted by Dimitri Thomopoulos.

- D. Fioriti, D. Thomopulos, “Un algoritmo olistico per la progettazione di comunità energetiche”, Convegno AUTENS – Comunità Energetiche: una possibilità concreta per la sostenibilità, Pisa, December 2022
- D. Thomopulos, L. Bai, E. Crisostomi, G. Pannocchia, “Decomposition Methods for Distributed Control of Microgrid Networks”, The Association of European Operational Research Societies Conference 2019 (EURO 2019), Dublin, June 2019
- D. Thomopulos, W. Ackooij, P. Benchimol, C. D’Ambrosio, “A path-based formulation for the 2-reservoir hydro unit commitment problem”, The Association of European Operational Research Societies conference 2018 (EURO 2018), Valencia, July 2018
- D. Thomopulos, W. Ackooij, P. Benchimol, C. D’Ambrosio, “A Constrained Shortest Path formulation for the Hydro Unit Commitment Problem”, International Symposium on Mathematical Programming 2018 (ISMP 2018), Bordeaux, July 2018
- W. Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, D. Thomopulos, S. Toubaline, “Shortest Path Problem variants for the Hydro Unit Commitment Problem”, The Association of European Operational Research Societies/Associación Latino-Ibero-Americana de Investigación Operativa conference 2018 (EURO/ALIO 2018), Bologna, June 2018
- D. Thomopulos, W. Ackooij, P. Benchimol, C. D’Ambrosio, “A Constrained Shortest Path formulation for the Two-Reservoir Hydro Unit Commitment Problem”, Cologne-Twente Workshop on Graphs and Combinatorial Optimization 2018 (CTW 2018), Paris, June 2018
- W. Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, D. Thomopulos, S. Toubaline, “Shortest Path Problem variants for the Hydro Unit Commitment Problem”, Société Française de Recherche Opérationnelle et d’Aide à la Décision 2018 (ROADEF 2018), Lorient, February 2018
- W. Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, D. Thomopulos, S. Toubaline, “Shortest Path Problem variants for the Hydro Unit Commitment Problem”, Programme Gaspard Monge 2017 (PGMO DAYS 2017), Palaiseau, November 2017
- D. Thomopulos, W. Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, S. Toubaline, “A path-based formulation for the Hydro Unit Commitment and Scheduling problem”, Cologne-Twente Workshop on Graphs and Combinatorial Optimization 2017 (CTW 2017), Cologne, June 2017
- D. Thomopulos, W. Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, S. Toubaline, “A path-based formulation for the Hydro Unit Commitment and Scheduling problem”, Conference on Computational Management Science 2017 (CMS 2017, Bergamo), May 2017
- A. Lodi, E. Malaguti, G. Nannicini, D. Thomopulos, “Nonlinear chance-constrained problems with applications to hydro scheduling”, convegno Mathematical Optimization in the Decision Support Systems for Efficient and Robust Energy Networks Final Conference 2017 (COST TD1207 2017), Modena, March 2017
- A. Lodi, E. Malaguti, G. Nannicini, D. Thomopulos, “Nonlinear chance-constrained problems with applications to hydro scheduling”, International Symposium on Mathematical Programming 2015 (ISMP 2015), Pittsburgh, July 2015
- D. Thomopulos, A. Lodi, E. Malaguti, G. Nannicini, “Separation algorithms for nonlinear chance-constrained problems with applications to hydro scheduling”, *Poster Session*, SECOND SEVILLA WORKSHOP on Mixed Integer Nonlinear Programming, Seville, March 2015
- A. Lodi, E. Malaguti, G. Nannicini, D. Thomopulos, “Separation algorithms for nonlinear chance-constrained problems with applications to hydro scheduling”, Veszprém Optimization Conference 2014 (VOCAL 2014), Veszprém, December 2014
- F. Furini, E. Malaguti, D. Thomopulos, “Modeling Two-Dimensional Guillotine Knapsack Problems via Integer Programming”, Italian Association of Operations Research Conference 2014 (AIRO 2014), Como, September 2014
- F. Furini, E. Malaguti, D. Thomopulos, “Modeling Two-Dimensional Guillotine Knapsack Problems via Integer Programming”, International Symposium on Combinatorial Optimization 2014 (ISCO 2014), Lisbon, March 2014

- F. Furini, E. Malaguti, D. Thomopulos, “Models for Two-Dimensional Guillotine Knapsack Problems”, The Association of European Operational Research Societies/ The Institute for Operations Research and the Management Sciences Conference 2013 (EURO—INFORMS MMXIII), Roma, July 2013

FULL LIST OF SCIENTIFIC PUBLICATIONS

Until today, 24 papers have been published in both international journals and conferences. The corresponding h-index is 9 while the number of citations is 288 according to Google Scholar ($h = 8$ and the number of citations is 196 according to Scopus, Author ID: 57191861404, Orcid ID: <https://orcid.org/0000-0003-0601-1790>), last access January 2024.

Erdős number = 3 (via Jon Lee)

Publications in international journals

- [1.J] F. Furini, E. Malaguti, and D. Thomopulos. Modeling two-dimensional guillotine cutting problems via integer programming. *INFORMS Journal on Computing*, 28(4):736–751, 2016
- [2.J] E. Malaguti, G. Nannicini, and D. Thomopulos. Optimizing allocation in a warehouse network. *Electronic Notes in Discrete Mathematics*, 64:195–204, 2018
- [3.J] W. van Ackooij, C. D’Ambrosio, L. Liberti, R. Taktak, D. Thomopulos, and S. Toubaline. Shortest path problem variants for the hydro unit commitment problem. *Electronic Notes in Discrete Mathematics*, 69:309–316, 2018
- [4.J] S. Barmada, N. Fontana, D. Thomopulos, and M. Tucci. Autoencoder based optimization for electromagnetics problems. *Applied Computational Electromagnetics Society Journal*, 34(12):1875–1880, 2019
- [5.J] A. Tantet, M. Stéfanon, P. Drobinski, J. Badosa, S. Concettini, A. Creti, C. D’Ambrosio, D. Thomopulos, and P. Tankov. E4clim 1.0: The energy for a climate integrated model: Description and application to italy. *Energies*, 12(22), 2019
- [6.J] C. D’Ambrosio, J. Lee, D. Skipper, and D. Thomopulos. Handling separable non-convexities using disjunctive cuts. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12176 LNCS:102–114, 2020
- [7.J] S. Barmada, N. Fontana, L. Sani, D. Thomopulos, and M. Tucci. Deep learning and reduced models for fast optimization in electromagnetics. *IEEE Transactions on Magnetics*, 56(3), 2020
- [8.J] X. Fan, E. Crisostomi, D. Thomopulos, B. Zhang, and S. Yang. Controlled islanding algorithm for ac/dc hybrid power systems utilising dc modulation. *IET Generation, Transmission and Distribution*, 14(26):6440–6449, 2020
- [9.J] X. Fan, E. Crisostomi, D. Thomopulos, B. Zhang, R. Shorten, and S. Yang. An optimized decentralized power sharing strategy for wind farm de-loading. *IEEE Transactions on Power Systems*, 36(1):136–146, 2021
- [10.J] A. Betti, M. Tucci, E. Crisostomi, A. Piazzini, S. Barmada, and D. Thomopulos. Fault prediction and early-detection in large pv power plants based on self-organizing maps. *Sensors*, 21(5):1–16, 2021
- [11.J] G. Anastasi, C. Bartoli, P. Conti, E. Crisostomi, A. Franco, S. Saponara, D. Testi, D. Thomopulos, and C. Vallati. Optimized energy and air quality management of shared smart buildings in the covid-19 scenario. *Energies*, 14(8), 2021
- [12.J] S. Barmada, N. Fontana, A. Formisano, D. Thomopulos, and M. Tucci. A deep learning surrogate model for topology optimization. *IEEE Transactions on Magnetics*, 57(6), 2021

- [13.J] W. van Ackooij, C. D'Ambrosio, D. Thomopulos, and R.S. Trindade. Decomposition and shortest path problem formulation for solving the hydro unit commitment and scheduling in a hydro valley. *European Journal of Operational Research*, 291(3):935–943, 2021
- [14.J] M. Tucci, S. Barmada, A. Formisano, and D. Thomopulos. A regularized procedure to generate a deep learning model for topology optimization of electromagnetic devices. *Electronics (Switzerland)*, 10(18), 2021
- [15.J] A. Lodi, E. Malaguti, G. Nannicini, and D. Thomopulos. Nonlinear chance-constrained problems with applications to hydro scheduling. *Mathematical Programming*, 191(1):405–444, 2022
- [16.J] S. Barmada, A. Formisano, D. Thomopulos, and M. Tucci. Deep learning as a tool for inverse problems resolution: a case study. *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, 41(6):2120–2133, 2022
- [17.J] Ivan Mariuzzo, Davide Fioriti, Emanuele Guerrazzi, Dimitri Thomopulos, and Marco Raugi. Multi-objective planning method for renewable energy communities with economic, environmental and social goals. *International Journal of Electrical Power and Energy Systems*, 153:109331, 2023
- [18.J] Emanuele Guerrazzi, Dimitri Thomopulos, Davide Fioriti, Ivan Mariuzzo, Eva Schito, Davide Poli, and Marco Raugi. Design of energy communities and data-sharing: Format and open data. *Energies*, 16(17), 2023
- [19.J] Edoardo Barabino, Davide Fioriti, Emanuele Guerrazzi, Ivan Mariuzzo, Davide Poli, Marco Raugi, Ehsan Razaeei, Eva Schito, and Dimitri Thomopulos. Energy communities: A review on trends, energy system modelling, business models, and optimisation objectives. *Sustainable Energy, Grids and Networks*, 36, 2023
- [20.J] Dimitri Thomopulos, Wim van Ackooij, Claudia D'Ambrosio, and Marc Stefanon. Generating hydro unit commitment instances. *TOP*, 2023

Publications on international conference proceedings

- [1.C] M. Tucci, S. Barmada, L. Sani, D. Thomopulos, and N. Fontana. Deep neural networks based surrogate model for topology optimization of electromagnetic devices. In *2019 International Applied Computational Electromagnetics Society Symposium in Miami, ACES-Miami 2019*, 2019
- [2.C] D. Thomopulos, W. van Ackooij, C. D'Ambrosio, L. Liberti, R. Taktak, and S. Toubaline. A path-based formulation for the hydro unit commitment and scheduling problem. In *15th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, CTW 2017*, pages 139–142, 2020
- [3.C] X. Fan, E. Crisostomi, B. Zhang, and D. Thomopulos. Rotor speed fluctuation analysis for rapid de-loading of variable speed wind turbines. In *20th IEEE Mediterranean Electrotechnical Conference, MELECON 2020 - Proceedings*, pages 482–487, 2020
- [4.C] X. Fan, E. Crisostomi, D. Thomopulos, B. Zhang, and R. Shorten. A decentralized power sharing strategy for wind farm de-loading. In *IEEE Power and Energy Society General Meeting*, volume 2020-August, 2020

Ph.D. Thesis

- [1.Thesis] D. Thomopulos. Models and Solutions of Resource Allocation Problems based on Integer Linear and Nonlinear Programming, PhD. Thesis, May 2016

COMPUTER SKILLS

Excellent Knowledge of: C, C++, MATLAB, Html, PHP, Javascript, CSS, Drupal, SwishMax, Microsoft Office, Photoshop, Arena, OPL, Cplex, SCIP, AMPL, BONMIN, IPOPT, GAMS, Julia, Python, UNIX Systems

Basic Knowledge of: Java, Sql, OpenModelica

LANGUAGES

Italian: Native

Greek: Native

English: Fluent

French: Elementary

ADDITIONAL PROFESSIONAL EXPERIENCE

Administrator of an 8-node cluster, CENTOS 6.x

- Cluster Administrator from January 2014 to January 2017

MINO - Initial Training Network Mixed Integer Nonlinear Optimization - Challenge 2016

- Web Administrator from May 2016 to January 2017

OR@Unibo - Operations Research Group Bologna

- Web Administrator from January 2015 to January 2017

VeRoLog - Vehicle Routing and Logistics Optimization

- Web Administrator from February 2013 to December 2017

MINO - Initial Training Network Mixed Integer Nonlinear Optimization

- Web Administrator from April 2013 to January 2017

SRM-Reti e Mobilità S.r.l., Agency for local public mobility and transportation of the Municipality of Bologna and the Metropolitan City of Bologna

- Curricular Internship from November 2010 to February 2011

Pisa, February 1, 2024