

# Carmine Cerrone, Ph.D.

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SSD MATH-06/A - Ricerca operativa      GSD 01/MATH-06 - RICERCA OPERATIVA

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🌐 <https://www.scopus.com/authid/detail.uri?authorId=55817360900>

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## Employment History

- 2022 – . . . . . 📌 **Associate Professor**, University of Genoa Dept. of Economics.
- 2019 – 2022 📌 **Assistant Professor**, (RTD-B) University of Genoa Dept. of Economics.
- 2016 – 2019 📌 **Research Fellow**, (RTD-A) University of Molise Biosciences and Territory Dept.
- 2016 – 2016 📌 **Visiting Researcher**, University of Maryland Dept. Decision, Operations & Information Technologies.
- 2015 – 2016 📌 **Research Fellow**, IASI (Institute for Systems Analysis and Computer Science) CNR (Italy).
- 2014 – 2015 📌 **Research Fellow**, University of Calabria Dept. of Mechanical, Energetic and Management Engineering.
- 2013 – 2014 📌 **Research Fellow**, University of Salerno Dept. of Computer Science.
- 2013 – 2013 📌 **Research Fellow**, University of Maryland Dept. Decision, Operations & Information Technologies.
- 2012 – 2013 📌 **Research Fellow**, University of Salerno Dept. of Computer Science.

## Professional Acknowledgements

- 2023 📌 **Full Professor ASN** Habilitation as Full Professor in Operations Research from the Italian Ministry of Education.
- 2018 📌 **Associate Professor ASN** Habilitation as Associate Professor in Operations Research from the Italian Ministry of Education.

## Education


- 2010 📌 **Ph.D., Operations Research** University of Calabria, Department of Electronics Informatics and Systematics.  
Thesis title: *OMEGA OUR MULTI ETHNIC GENETIC ALGORITHM*.
- 2006 📌 **Honours degree in Computer Science** University of Salerno.  
Thesis title: *The Vertex Cover Problem..*

## Editorial Activity

- 2018 – . . . . . 📌 **Associate Editor**, "Soft Computing" (Springer). In this role, I contribute to the editorial process of the "Soft Computing" journal, reviewing and assessing research submissions in the field of Combinatorial Optimisation, collaborating with authors and reviewers, and assisting in the publication process.
- 2020 – . . . . . 📌 **Editorial Board**, "Advances in Computational Intelligence" (Springer).





## Editorial Activity (continued)

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- 2010 – . . . . .  **Reviewer**, for numerous scientific journals and international conferences, including: European Journal of Operational Research, Networks, Computers & Operations Research, Transportation Research Part B, Soft Computing, Applied Soft Computing, Journal of Optimisation, Sensors, Journal of Electrical and Computer Engineering, Discrete Applied Mathematics.

## Affiliations

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- 2022 – . . . . .  **VeRoLog**, EURO working group on Vehicle Routing and Logistics.
- 2022 – . . . . .  **EU/ME**, EURO working group on Metaheuristics.
- 2019 – . . . . .  **CIELI**, C.I.E.L.I. - Italian Centre of Excellence in Integrated Logistics.
- 2006 – . . . . .  **AIRO**, Italian association of Operations Research.





## PhD

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- 2024 – . . . . .  **PhD Student Supervisor**, for Maria Truvolo, PhD in Strategic Engineering and Decision Methods, University of Genoa.
- 2023  **Member of the final PhD examination committee** for student Dinh Nho Minh, University of Brescia. PhD thesis title: 'ANALYTICS FOR ECONOMICS AND MANAGEMENT – AEM'.
- 2022 – . . . . .  **Co-supervisor**, along with Prof. Bruce Golden, for PhD student Jiaqi Wang, at University of Maryland.
-  **PhD Student Supervisor**, for Raffaele Dragone, PhD in Strategic Engineering and Decision Methods, University of Genoa.
- 2022 – . . . . .  **PhD course holder**, Foundations of Programming for Problem solving in Python University of Genoa.
- 2021 – . . . . .  **Doctoral Program Committee Membership**, "Strategic Engineering and Decision Methods" University of Genoa.
- 2020  **External Reviewer for Doctoral Thesis**, Title: "Classification of Medical Images: Instance Space Optimization Models for Multiple Instance Learning" PhD in ICT, University of Calabria.
- 2018 – 2021  **PhD Student Supervisor**, for Andrea Di Placido, PhD in BIOSCIENCES AND TERRITORY, University of Molise Italy.
- 2016 – 2018  **Doctoral Program Committee Membership**, "BIOSCIENCES AND TERRITORY" University of Molise Italy.

## Institutional and Academic Appointments/Committees

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- 2023 – . . . . .  **WEB**, Member of the Web Committee of the Department of Economics at the University of Genoa.
- 2021 – . . . . .  **AQ**, Member of the Quality Control Commission of the CLEMT Program Council, University of Genoa.
- 2021 – 2022  **Deputy Coordinator**, of the CLEMT Program Council, University of Genoa.
- 2016 – 2018  **AQ Chair**, of the Quality Management Unit of the Computer Science Program Council, University of Molise.

## Organization of Events and Conferences




- 2024 ■ **Metaheuristics Competition Chair**, MESS Metaheuristics Summer School, 15-18 July Catania Italy.
- 2023 ■ **Scientific Committee**, NUMTA International Conference and Summer School "Numerical Computations: Theory and Algorithms", 14-20 June Calabria Italy.
- 2021 ■ **Metaheuristics Competition Chair**, MESS Metaheuristics Summer School, 15-18 June Catania Italy.
- 2019 ■ **Scientific Committee**, NUMTA International Conference and Summer School "Numerical Computations: Theory and Algorithms", 15-21 June Crotone Italy.
- 2018 ■ **Metaheuristics Competition Chair**, MESS Metaheuristics Summer School, 21-25 July Acireale Italy.
- 2018 ■ **Scientific and Organizing Committee**, ICCL International Conference on Computational Logistics, 1-3 October Vietri Sul Mare Italy.
- 2017 ■ **Organizing Committee**, ODS Annual Meeting of AIRO, International Conference on Optimization and Decision Science, 4-7 September Sorrento Italy.
- 2017 ■ **Conference Chair**, HMFMA International Workshop on Heuristics and Metaheuristics: Foundation, Methodology and Applications, 19-21 June Pesche-Agnone Italy.
- 2016 ■ **Program Committee**, HM International Workshop on Hybrid Meta-heuristics, 8-10 June, Plymouth, United Kingdom.
- 2016 ■ **Organizing Committee**, ISCO International Symposium on Combinatorial Optimization, 18-20 May Vietri sul Mare Italy.
- 2012 ■ **Organizing Committee**, AIRO Annual Meeting of the Italian Operations Research Association, International Conference on Optimization and Decision Science, 4-7 September Sorrento Italy.

## Research Projects

- 2022 ■ **Principal Investigator**, for the Research Projects of National Interest (PRIN): "Energy Consumption Optimization: Rethinking Solution Algorithms (ECO-RESTART)". The project was not funded but received a rating of 92/100.
- 2021 ■ **Scientific Supervisor**, for the University of Genoa for third-party research activity related to the project SmartWarehouse, Optimization Algorithm Testing. Client: FourClicks SRL.
- 2018 ■ **Scientific Supervisor**, for the University of Molise for third-party research activity related to the project: OPTIT, Development of Advanced Software Components. Client: OPTIT SRL.
- 2018 ■ **Scientific Supervisor**, for the University of Molise for third-party research activity (€50,000) related to the project: SMARTE, Call for Large R&D Projects – PON I&C 2014-2020, funded from PON 'Businesses and Competitiveness' resources 2014-2020, as specified in the Decree of the Ministry of Economic Development dated June 9, 2016. Client: NEXSOFT SPA.
- 2018 ■ **Scientific Supervisor**, for the University of Molise for third-party research activity 'Optimized Movement of Product Issues, Returns, and Transfers,' commissioned by Starboard Solutions Corp, Traverse City, MI, USA.




## Teaching Activities

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- 2021 – 2024     –**Python Algorithms & Optimization**, University of Genoa, (language: English).  
–**Operation Research for strategic decisions: models, methods and game theory**, University of Genoa, (language: English).  
–**Ricerca Operativa**, University of Genoa, (language: Italian).
- 2019 – 2021     –**Operation Research for strategic decisions: models, methods and game theory**, University of Genoa, (language: English).  
–**Ricerca Operativa**, University of Genoa, (language: Italian).
- 2018 – 2019     –**Metodi di Ottimizzazione**, University of Molise.  
–**Geometria**, University of Molise.  
–**Logistica**, University of Molise.  
–**Matematica**, University of Molise.
- 2017 – 2018     –**Metodi di Ottimizzazione**, University of Molise.  
–**Logistica**, University of Molise.  
–**Matematica**, University of Molise.
- 2016 – 2017     –**Metodi di Ottimizzazione**, University of Molise.  
–**Ricerca Operativa**, University of Molise.  
–**Matematica**, University of Molise.
- 2016 – . . . .     **Bachelor's and Master's Thesis**. Supervisor and Co-Supervisor for dozens of undergraduate and graduate theses.

## Invited Seminars

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- 2018     **May**, Institute of Systems Analysis and Computer Science "Antonio Ruberti" CNR. Speaker at the seminar: "On the Close Enough Traveling Salesman Problem".
- 2017     **December**, Université de Lorraine (France), Laboratory LCOMS. Invited speaker at the seminar: "Carousel Greedy: A Generalized Greedy Algorithm".
- 2009     **October**, University of Maryland (US). Speaker at the seminar: "Multi-Ethnic Genetic Algorithm".

## Research Publications

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### Journal Articles

- 1    **C. Cerrone** and D. D. Russo, "An exact reduction technique for the k-colour shortest path problem," *Computers & Operations Research*, vol. 149, p. 106 027, 2023.
- 2    A. Di Placido, C. Archetti, **C. Cerrone**, and B. Golden, "The generalized close enough traveling salesman problem," *European Journal of Operational Research*, vol. 310, no. 3, pp. 974–991, 2023.
- 3    J. Wang, B. Golden, and **C. Cerrone**, "Carousel greedy algorithms for feature selection in linear regression," *Algorithms*, vol. 16, no. 9, p. 447, 2023.
- 4    D. Ambrosino and **C. Cerrone**, "A rich vehicle routing problem for a city logistics problem," *Mathematics*, vol. 10, no. 2, p. 191, 2022.
- 5    D. Ambrosino and **C. Cerrone**, "The cost-balanced path problem: A mathematical formulation and complexity analysis," *Mathematics*, vol. 10, no. 5, p. 804, 2022.
- 6    D. Ambrosino, **C. Cerrone**, and A. Sciomachen, "A constructive heuristics and an iterated neighborhood search procedure to solve the cost-balanced path problem," *Algorithms*, vol. 15, no. 10, p. 364, 2022.

- 7 C. Cerrone and A. Sciomachen, "Vrp in urban areas to optimize costs while mitigating environmental impact," *Soft Computing*, vol. 26, no. 19, pp. 10 223–10 237, 2022.
- 8 A. Di Placido, C. Archetti, and C. Cerrone, "A genetic algorithm for the close-enough traveling salesman problem with application to solar panels diagnostic reconnaissance," *Computers & Operations Research*, vol. 145, p. 105 831, 2022.
- 9 G. Capobianco, C. Cerrone, A. Di Placido, *et al.*, "Image convolution: A linear programming approach for filters design," *Soft Computing*, vol. 25, no. 14, pp. 8941–8956, 2021.
- 10 C. Cerrone, R. Cerulli, and A. Sciomachen, "Grocery distribution plans in urban networks with street crossing penalties," *Networks*, vol. 78, no. 3, pp. 248–263, 2021.
- 11 F. Carrabs, C. Cerrone, R. Cerulli, and B. Golden, "An adaptive heuristic approach to compute upper and lower bounds for the close-enough traveling salesman problem," *INFORMS Journal on Computing*, vol. 32, no. 4, pp. 1030–1048, 2020.
- 12 F. Carrabs, C. Cerrone, and R. Pentangelo, "A multiethnic genetic approach for the minimum conflict weighted spanning tree problem," *Networks*, vol. 74, no. 2, pp. 134–147, 2019.
- 13 C. Cerrone, C. D'Ambrosio, and A. Raiconi, "Heuristics for the strong generalized minimum label spanning tree problem," *Networks*, vol. 74, no. 2, pp. 148–160, 2019.
- 14 C. Cerrone, B. Dussault, X. Wang, B. Golden, and E. Wasil, "A two-stage solution approach for the directed rural postman problem with turn penalties," *European Journal of Operational Research*, vol. 272, no. 2, pp. 754–765, 2019.
- 15 F. Carrabs, C. Cerrone, R. Cerulli, and S. Silvestri, "On the complexity of rainbow spanning forest problem," *Optimization Letters*, vol. 12, pp. 443–454, 2018.
- 16 F. Carrabs, C. Cerrone, R. Cerulli, and S. Silvestri, "The rainbow spanning forest problem," *Soft Computing*, vol. 22, pp. 2765–2776, 2018.
- 17 S. Palma, D. Tamburri, R. Pareschi, C. Cerrone, and W.-J. van den Heuvel, "Business-savvy blockchains with gamification: A framework for collaborative problem solving," *EAI Endorsed Transactions on Serious Games*, vol. 5, no. 16, 2018.
- 18 F. Carrabs, C. Cerrone, R. Cerulli, and M. Gaudio, "A novel discretization scheme for the close enough traveling salesman problem," *Computers & Operations Research*, vol. 78, pp. 163–171, 2017.
- 19 C. Cerrone, R. Cerulli, and B. Golden, "Carousel greedy: A generalized greedy algorithm with applications in optimization," *Computers & Operations Research*, vol. 85, pp. 97–112, 2017.
- 20 O. Lum, C. Cerrone, B. Golden, and E. Wasil, "Partitioning a street network into compact, balanced, and visually appealing routes," *Networks*, vol. 69, no. 3, pp. 290–303, 2017.
- 21 C. Cerrone, R. Cerulli, and M. Gaudio, "Omega one multi ethnic genetic approach," *Optimization Letters*, vol. 10, no. 2, pp. 309–324, 2016.
- 22 C. Cerrone, R. Cerulli, and M. Gentili, "Vehicle-id sensor location for route flow recognition: Models and algorithms," *European Journal of Operational Research*, vol. 247, no. 2, pp. 618–629, 2015.
- 23 L. Bianco, C. Cerrone, R. Cerulli, and M. Gentili, "Locating sensors to observe network arc flows: Exact and heuristic approaches," *Computers & Operations Research*, vol. 46, pp. 12–22, 2014.
- 24 F. Carrabs, C. Cerrone, and R. Cerulli, "A memetic algorithm for the weighted feedback vertex set problem," *Networks*, vol. 64, no. 4, pp. 339–356, 2014.
- 25 C. Cerrone, R. Cerulli, and A. Raiconi, "Relations, models and a memetic approach for three degree-dependent spanning tree problems," *European Journal of Operational Research*, vol. 232, no. 3, pp. 442–453, 2014.

- 26 **C. Cerrone**, B. Dussault, B. Golden, and E. Wasil, "Multi-period street scheduling and sweeping," *International Journal of Metaheuristics*, vol. 3, no. 1, pp. 21–58, 2014.

## Conference Papers

- 1 **C. Cerrone**, R. Dragone, and A. Sciomachen, "A branch bound algorithm for the rainbow spanning forest problem," Springer International Publishing, 2024, Accepted.
- 2 **C. Cerrone**, M. Truvalo, R. Dragone, and R. Battaglia, "The trigger arc tsp: Optimise the picking process in warehouses with compactable storage systems.," Springer International Publishing, 2024, Accepted.
- 3 R. Dragone, R. Battaglia, and **C. Cerrone**, "Integrating human-centric ai in fashion industry optimization: A step towards industry 5.0.," Springer International Publishing, 2024, Accepted.
- 4 **C. Cerrone**, A. Di Placido, and D. D. Russo, "A genetic algorithm for minimum conflict weighted spanning tree problem," Springer International Publishing, 2019, pp. 445–455.
- 5 D. D. Russo, **C. Cerrone**, and A. Di Placido, "The mixed-constrained routing problem—a combination of carp and cetsp," 2019.
- 6 **C. Cerrone**, M. Gentili, C. D'Ambrosio, and R. Cerulli, "An efficient and simple approach to solve a distribution problem," Springer International Publishing, 2018, pp. 151–159.
- 7 G. Capobianco, **C. Cerrone**, R. Cerulli, and G. Felici, "Optimal paths for dual propulsion vehicles on real street network graphs," in *Optimization and Decision Science: Methodologies and Applications: ODS, Sorrento, Italy, September 4-7, 2017 47*, Springer International Publishing, 2017, pp. 517–527.
- 8 F. Carrabs, **C. Cerrone**, R. Cerulli, and C. D'Ambrosio, "Improved upper and lower bounds for the close enough traveling salesman problem," in *Green, Pervasive, and Cloud Computing: 12th International Conference, GPC 2017, Cetara, Italy, May 11-14, 2017, Proceedings 12*, Springer International Publishing, 2017, pp. 165–177.
- 9 F. Carrabs, **C. Cerrone**, C. D'Ambrosio, and A. Raiconi, "Column generation embedding carousel greedy for the maximum network lifetime problem with interference constraints," in *Optimization and Decision Science: Methodologies and Applications: ODS, Sorrento, Italy, September 4-7, 2017 47*, Springer International Publishing, 2017, pp. 151–159.
- 10 **C. Cerrone**, R. Cerulli, B. Golden, and R. Pentangelo, "A flow formulation for the close-enough arc routing problem," in *Optimization and Decision Science: Methodologies and Applications: ODS, Sorrento, Italy, September 4-7, 2017 47*, Springer International Publishing, 2017, pp. 539–546.
- 11 F. Carrabs, **C. Cerrone**, and R. Cerulli, "A tabu search approach for the circle packing problem," in *2014 17th International conference on network-based information systems*, IEEE, 2014, pp. 165–171.

## Conference Presentations (speaker in bold)

- 1 **C. Cerrone**, *The trigger arc tsp: Optimise the picking process in warehouses with compactable storage systems*. ISC, 6-7 June Valencia Spain., 2024.
- 2 **C. Cerrone** and B. Golden, *Carousel greedy algorithm for the minimum stretch spanning tree problem*. EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH, 30 June-3 July Copenhagen Denmark., 2024.
- 3 **C. Cerrone**, *A generalized close-enough traveling salesman problem for rfid meter reading*. ODS, 4-7 September Ischia Italy., 2023.
- 4 **C. Cerrone**, C. Archeti, A. Di Placido, and B. Golden, *The generalized close-enough traveling salesman problem*. EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH, 3-6 July Espoo Finland., 2022.

- 5 C. Cerrone, A. Sciomachen, and D. Ambrosino, *A multi period vrp for evaluating distribution strategies*. ODS, 30 August – 2 September Florence Italy., 2022.
- 6 C. Cerrone, A. Sciomachen, and R. Cerulli, *Vehicle routing problem in urban area: Optimize costs by mitigating environmental impact*. 30th EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH, 23-26 June Dublin Ireland., 2019.
- 7 C. Cerrone, A. Sciomachen, and R. Cerulli, *Vehicle routing problem in urban area: The role of parking availability in mitigating environmental impact*. 5th Soft Computing Days, 1-4 October Nanchang, China.<invited speaker>, 2019.
- 8 C. Cerrone, A. Sciomachen, and R. Cerulli, *Vehicle routing problem in urban area: The role of parking availability in mitigating environmental impact*. ODS, 4-7 September Genova, Italy., 2019.
- 9 C. Cerrone, G. Capobianco, R. Cerulli, and G. Felici, *A mathematical model for dual propulsion vehicles*. 4° Soft Computing Days, 18-20 June, Salerno/Benevento, Italy., 2018.
- 10 C. Cerrone, F. Carrabs, R. Cerulli, and B. Golden, *A carousel greedy approach to the close enough traveling salesman problem*. EURO/ALIO International Conference on Applied Combinatorial Optimization, 25-27 June, 2018, Bologna, Italy., 2018.
- 11 C. Cerrone, F. Carrabs, R. Cerulli, and B. Golden, *Bounds calculation for the close enough traveling salesman problem*. ISCO 2018 International Symposium on Combinatorial Optimization, 11-13 April, Marrakesh Morocco., 2018.
- 12 C. Cerrone, F. Carrabs, R. Cerulli, and B. Golden, *The discrete p-dispersion problem for the close enough traveling salesman problem*. EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH, 8-11 July, Valencia, Spain., 2018.
- 13 C. Cerrone, M. Gentili, C. D'Ambrosio, and R. Cerulli, *An efficient and simple approach to solve a distribution problem*. ODS, 10-13 September, Taormina, Italy., 2018.
- 14 C. Cerrone, G. Capobianco, R. Cerulli, and G. Felici, *Optimal paths for dual propulsion vehicles on real street network graphs*. ODS Conference, 4-7 September, Sorrento Italy., 2017.
- 15 C. Cerrone, R. Cerulli, and B. Golden, *Carousel greedy: A generalized greedy algorithm*. EU/ME 2017 18th free workshop on metaheuristics for a better world, 3-4 April, Rome Italy., 2017.
- 16 C. Cerrone, G. Capobianco, R. Cerulli, and G. Felici, *The energetic shortest path problem*. AIRO Conference, September, Trieste, Italy., 2016.
- 17 C. Cerrone, F. Carrabs, and R. Cerulli, *A discretization scheme for the close enough traveling salesman problem*. Soft Computing Days, 26-30 November Beijing, China.<invited speaker>, 2016.
- 18 C. Cerrone, R. Cerulli, F. Carrabs, and M. Gaudio, *Solutions approaches for the close enough traveling salesman problem*. AIRO Winter, 25-30 January, Champoluc, Italy., 2015.
- 19 C. Cerrone, R. Cerulli, and B. Golden, *Carousel greedy: A generalized greedy algorithm for optimizing the cardinality of a set*. AIRO Conference, September, Como, Italy., 2014.
- 20 C. Cerrone, R. Cerulli, M. Gentili, and L. Bianco, *New resolution approaches for the sensor location problem (slp)*. EWGLA Conference, 28-30 April, Naples, Italy., 2010.
- 21 C. Cerrone, R. Cerulli, and A. Raiconi, *A genetic approach for bounded degree spanning tree problems*. AIRO Conference, 7-10 September, Villa San Giovanni, Italy., 2010.
- 22 C. Cerrone and R. Cerulli, *A platform for the design and experimental evaluations of graphs algorithms*. AIRO Conference, 5-8 September, Genoa, Italy., 2007.
- 23 C. Cerrone and R. Cerulli, *A 2-approximated algorithm and a efficient heuristic for the minimum vertex cover problem*. CTW Conference on Graphs and Combinatorial Optimization, 5-9 June Cologne, Germany., 2006.

## Other Professional Experiences

- 2024 ■ **Instructor** at the "Big Data Analysis" course for CISITA - Via del Molo, 1/a - 19126 La Spezia (SP). The course was held in Savona and the topics covered were Big Data and Data Analysis.
- 2018 – 2020 ■ **Consultant** for optimization projects at "Starboard Corporation," a logistics company based in Michigan.
- 2012 – 2014 ■ **Consultant** for the PON01\_02705 project "FIBAC Innovative Enjoyment of Artistic and Cultural Assets."
- 2012 – 2014 ■ **Consultant** for the PON01\_00990 project "Automotive Enterprise 2.0: Social and Semantic Methodologies and Techniques for the Automotive Sector."
- 2012 – 2016 ■ **CEO** at NPsof S.R.L. San Giuseppe Vesuviano (NA).
- 2012 – 2013 ■ **Consultant** for the "AMP4VAS" project for the development of a banking authoring platform. (Client: Metoda S.p.A.).
- 2011 ■ **Consultant** for the OpenHMI project for the development of a visual programming environment for HMI (Human-Machine Interface) devices. (Client: NEXSOFT S.p.A.).
- **Instructor** at the "Master Web Design" training course for Formatict snc. The course took place in Bologna, and the topics covered were JavaScript, XML, and XSLT.
- 2008 – 2009 ■ **Project Manager** for the EDOSOC project for the management of social housing in the Lazio region. (Client: LAIT S.p.A.).
- 2007 – 2008 ■ **Project Manager** for the AEDC project for the management of religious buildings in Lazio. (Client: LAIT S.p.A.).
- 2007 – 2007 ■ **Project Manager** for the GAMP project for the management of POS (Point of Sale) transactions. (Client: BPM Banca Popolare di Milano).
- 2003 – 2006 ■ **CEO** of the startup C.N.P. Software, Eboli (SA).
- 2001 – 2003 ■ **Software Developer** at Studio Gamma, Battipaglia (SA).
- 2000 – 2001 ■ **Software Developer** at Serin Sistemi, Salerno.

## Skills

- Languages ■ Native Italian speaker. Strong reading, writing, and speaking competencies for English.
- Coding ■ Java, JavaScript, C, C++, Python, Cplex, Gurobi, LpSolve, SQL, XML, HTML, JSON,  $\LaTeX$ , Mathematical Programming, ...
- Misc. ■ Academic research, teaching, training, consultation.