

EUROPEAN  
CURRICULUM VITAE  
FORMAT



PERSONAL INFORMATION

Name **Bruglieri Maurizio**  
Address [REDACTED]  
Telephone [REDACTED]  
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E-mail [REDACTED]  
Nationality [REDACTED]  
Date of birth [REDACTED]

WORK EXPERIENCE

- Dates (2005 – Present)  
• Name and address of employer **Politecnico di Milano – Dept of Design**  
Via Durando, 38/a  
20156 Milano  
+39. 02.2399.5906  
• Type of business or sector University  
• Occupation or position held **Researcher (Assistant professor)** Scientific Field MAT/09 (Operations Research)  
• Main activities and responsibilities Research and teaching activities
  
- Dates (2010 – Present)  
• Name and address of employer **Politecnico di Milano – School of Industrial and Information technology Engineering – Bovisa campus**  
Via La Masa, 34  
20156 Milano  
+39. 02.2399.8323  
• Type of business or sector University  
• Occupation or position held **Professor**  
• Main activities and responsibilities Professor of Operations Research course for Aeronautical Engineering. Graduate Degrees Supervisor (Tutor and Co-tutor)
  
- Dates (2005 – 2013)  
• Name and address of employer **Politecnico di Milano – School of Industrial and Information technology Engineering – Piacenza campus**  
Via La Masa, 34  
20156 Milano  
+39. 02.2399.6875  
• Type of business or sector University  
• Occupation or position held **Professor**  
• Main activities and responsibilities Professor of Operations Research course for Transport Engineering. Graduate Degrees Supervisor (Tutor and Co-tutor)

- Dates (March 2011-February 2013)
- Name and address of employer

**Politecnico di Milano – Green Move Project**

Via Durando, 38/a  
20156 Milano  
+39. 02.2399.5906

University

Research Consultant

Consultant for the optimization of an electric vehicle sharing service

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

- Dates (2011-2012)

- Name and address of employer

**Politecnico di Milano – Convenzione Protezione Civile (National Civil Protection agreement)**

Via Durando, 38/a  
20156 Milano  
+39. 02.2399.5906

University

Research Consultant

Consultant for the optimization of hazardous material transportation in tunnels

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

- Dates (2010- 2011)

- Name and address of employer

**Politecnico di Milano – PoliUniPool Project**

Via Durando, 38/a  
20156 Milano  
+39. 02.2399.5906

University

Research Consultant

Consultant for the optimization of the crews in an organized carpool service

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

- Dates (2007-2009)

- Name and address of employer

**CEFRIEL – Politecnico di Milano**

ICT Center of Excellence For Research, Innovation, Education & industrial Labs partnership  
Via Fucini, 2 · 20133 Milano (Italy)  
p. +39 02 2395 4245

Center of Excellence for Innovation, Research and Education

Research Consultant

Consultant for the optimization of the logistic of Waste of Electric and Electronics Equipment

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

- Dates (2001 – 2005)

- Name and address of employer

**Politecnico di Milano – Faculty of Engineering - Dept of Electronics and Information Technology**

Via Ponzio 34/5  
20133 Milano  
+39. 02.2399.3401

University

**Temporary Research Associate**

Research activities for vehicle routing problems arising in the optimization of separate waste collection

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

## EDUCATION AND TRAINING

- Dates (1998-2001)
  - Name and type of organisation providing education and training Politecnico of Milan – Technical University
  - Principal subjects/occupational skills covered Operations research: combinatorial optimization problems with cardinality constraints
  - Title of qualification awarded PhD Applied Mathematics
  - Level in national classification (if appropriate)
  
- Dates (1997)
  - Name and type of organisation providing education and training University of Camerino | Faculty of Sciences and Technology
  - Principal subjects/occupational skills covered Inverse problems in mathematics physic
  - Title of qualification awarded Master degree in Mathematics (110/110 cum laude)
  - Level in national classification (if appropriate)

## PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE ITALIAN

OTHER LANGUAGES

- Reading skills ENGLISH GOOD
- Writing skills GOOD
- Verbal skills GOOD

- Reading skills FRENCH GOOD
- Writing skills GOOD
- Verbal skills GOOD

SOCIAL SKILLS AND COMPETENCES

I'm working with young people, mainly master degree students or temporary researcher: it is important for me to transmit them passion and enthusiasm.

ORGANISATIONAL SKILLS AND COMPETENCES

Distinguished and acknowledged experience in working within or leading multidisciplinary groups.  
Involved in several research activities, his areas of investigation is Operations Research applied to the transportation and logistics fields.  
Since 2001, he has been involved as investigator in a number of research projects, such as: Gesenu, DREAMS, PoliUniPool, Green Move.

OTHER SKILLS AND COMPETENCES.

**ANNEXES**

A1. Scientific activities: research experiences

A2. Publications, proceedings of international conferences and books

## ANNEX1 \_SCIENTIFIC ACTIVITIES: RESEARCH EXPERIENCES

2005-2017 Politecnico of Milan | Dept of Design

- **Responsible of the research project “Multidisciplinary design of sharing services”** financed by Design Department of Politecnico di Milano through the FARB2014 competition (2015-oggi)
- **Scientific co-operation in the research project: “Green Move: setting up of a procedure to design and evaluate a ZEV sharing system for the city of Milan.** A project financed by Regione Lombardia that involves eight research centres of Politecnico di Milano. (2012-2013)
- **Scientific co-operation in the research project: “PoliUniPool”** (optimization of the crews in an organized carpool service) ), partner Fondazione Politecnico di Milano. Research project financed by Politecnico di Milano and University of Milano.
- **Research Investigator - Project (PRIN 2005-2007) “Info-mobility systems and freight distribution in metropolitan areas”;** Prof. P.Dell’Olmo - University of Rome “La Sapienza”

### Research Interest

My areas of investigation is Operations Research applied to the transportation and logistics fields. Indeed, concerning transportation I dealt for instance with the following problems:

- optimization of vehicles for the separate waste collection (with a post-doc research grant at Politecnico of Milano)
- optimization of a dial-a-ride service (in the PRIN 2005-2007 project)
- reallocation of electric vehicles for a carsharing system (Green Move project)
- routing of hazmat
- train scheduling optimization.

Concerning logistics I dealt with:

- the optimization of the assignment of Waste Electric and Electronics Equipment (WEEE) collections points to the firms that produce such equipment
- the optimization of the running and planning of a biomass-based energy production process.

## Annex 2. Publications, proceedings of international conferences and books

### Publications on ISI journals

- [1] M. Baldi, M. Bruglieri, (2016). On the generalized bin packing problem. *International Transactions in Operational Research*, pp.1-14. doi:10.1111/itor.12258
- [2] M. Bruglieri, E. Gerzelj, A. Guenzani, R. Maja, R. A. Rosa, (2015). Solving the 3-D Yard Allocation Problem for Break Bulk Cargo via Variable Neighborhood Search Branching. *Electronic Notes in Discrete Mathematics* 47, 237-244
- [3] M. Bruglieri, F. Pezzella, O. Pisacane, S. Suraci, (2015). A Variable Neighborhood Search Branching for the Electric Vehicle Routing Problem with Time Windows. *Electronic Notes in Discrete Mathematics*, 47, 221-228.
- [4] M. Bruglieri, A. Colomi, A. Luè, (2014). The relocation problem for the one-way electric vehicle sharing. *Networks*, 64 (4), 292-305.
- [5] M. Bruglieri, P. Cappanera, M. Nonato, (2014). The Gateway Location Problem: Assessing the impact of candidate site selection policies. *Discrete Applied Mathematics*, Vol. 165, 96-111
- [6] M. Bruglieri, A. Colomi, A. Luè, (2014). The vehicle relocation problem for the one-way electric vehicle sharing: an application to the Milan case. *Procedia Social and Behavioral Sciences* 111, 18-27.
- [7] M. Bruglieri, P. Cappanera, M. Nonato, (2014). The Gateway Location Problem: Assessing the impact of candidate site selection policies. *Discrete Applied Mathematics*, vol. 165, pp. 96-111.
- [8] M. Bruglieri, D. Ciccarelli, A. Colomi, A. Luè, (2011). PoliUniPool: a carpooling system for universities. *Procedia Social and Behavioral Sciences*, 20: 558–567.
- [9] R. Aringhieri, M. Bruglieri, and R. Cordone (2009). Optimal results and tight bounds for the maximum diversity problem. *Foundations of Computing and Decision Sciences*, 34(2):73-85.
- [10] Amaldi E., Bruglieri M., Casale G. (2008). A two-phase relaxation-based heuristic for the maximum feasible subsystem problem, *Computers & Operations Research* vol. 35. issue 5, pp.1465-1482, doi:10.1016/j.cor.2007.04.001
- [11] Bruglieri M., Liberti L. (2008) Optimal running and planning of a biomass-based energy production process. *Energy Policy*. Vol. 36 (7), pp. 2430-2438, special issue of ORMMES 2006, 19th Mini-Euro Conference, September 6-8, 2006, COIMBRA doi:10.1016/j.enpol.2008.01.009
- [12] Bruglieri M., Ehrgott M, Hamacher H.W, Maffioli F. (2006). An annotated bibliography of combinatorial optimization problems with fixed cardinality constraints. *Discrete Applied Mathematics*. vol. 154, pp. 1344-1357 ISSN: 0166-218X. doi:10.1016/j.dam.2005.05.036.
- [13] Bruglieri M., M. Maffioli, F. Trubian, M. (2006). Solving minimum k-cardinality cut problems in planar graphs. *Networks*. vol. 48, pp. 195-208 ISSN: 0028-3045.
- [14] R. Aringhieri, M. Bruglieri, F. Malucelli, M. Nonato (2004) An asymmetric vehicle routing problem arising in the collection and disposal of special waste. *Electronic Notes in Discrete Mathematics* 17: 41-47.
- [15] M. Bruglieri, F. Maffioli, M. Ehrgott. (2004). Cardinality constrained minimum cut problems: complexity and algorithms. *Discrete Applied Mathematics* 137 (3): 311-341.

### Publications on books of scientific excellence and/or international diffusion

- [16] M. Bruglieri, P. Cappanera, A. Colomi, M. Nonato (2011). Modeling the Gateway Location Problem for Multicommodity Flow Rerouting. *Lecture Notes on Computer Science, Proceedings of INOC 2011, 13-16 June 2011, Hamburg (Germany)*: 262-276.
- [17] M. Bruglieri, P. Cappanera, A. Colomi, M. Nonato (2011). Modeling the Gateway Location Problem for Multicommodity Flow Rerouting. *Lecture Notes on Computer Science, Proceedings of INOC 2011, 13-16 June 2011, Hamburg (Germany)*: 262-276.
- [18] E. Amaldi, M. Bruglieri, B. Fortz (2011). On the Hazmat Transport Network Design Problem. *Lecture Notes on Computer Science, Proceedings of INOC 2011, 13-16 June 2011, Hamburg (Germany)*: 327-33.
- [19] Bruglieri M., Liberti L., (2009). *Optimally running a biomass-based energy production process*, in J. Kallrath, P. Pardalos, S. Rebennack (eds.), *Optimization in the Energy Industry*, Springer, 221-232.

- [20] Bruglieri M., Maja R., Marchionni G., Rainoldi G. (2008) *Hazardous material transportation safety: state of the art and emergent problems*. In C. Bersani, A. Boulmakoul, E. Garbolino, R. Sacile (eds.), *Advanced Technologies and Methodologies for Risk Management in the Global Transport of Dangerous Goods*, Vol. 45 of NATO Science for Peace and Security Series – E: Human and Societal Dynamics. ISBN: 978-1-58603-899-1
- [21] Bruglieri M., P. Maponi, M.C. Recchioni, F. Zirilli. (2009). *Differential equations and global optimization*. In C.A. Floudas and P.M. Pardalos (eds.), *Encyclopedia of Optimization 2009*. pp. 702-710. Springer.
- [22] Bruglieri M., Ciccarelli D., Colomi A., Luè A., (2008). Un software di supporto per l'organizzazione e l'ottimizzazione di un sistema di carpooling aziendale per l'area urbana di Milano. in A. Schiömmachen and G. Felici (eds.), *Scienze delle decisioni in Italia: applicazioni*, Ecig, Genova (in italian).
- [23] Aringhieri R., Bruglieri M., Lorandi M., Malucelli F., Nonato M., (2005). Uno strumento di supporto alle decisioni per l'ottimizzazione della raccolta di rifiuti differenziati. In: Pier Luigi Paolillo. *Rendiconti Cremonesi - Il contributo del Politecnico di Milano alla conoscenza delle dinamiche evolutive nel territorio di Cremona*. (pp. 223-235). ISBN: 88-7090-821-6. CLUP, Milano (in italian).

#### Proceedings of international conferences

- [24] M. Bruglieri, F. Bruschi, A. Colomi, A. Luè, R. Nocerino, V. Rana (2015). A real-time information system for public transport in case of delays and service disruptions. *Transportation Research Procedia, Proceedings of 18th Euro Working Group on Transportation, EWGT 2015, 14-16 July 2015, Delft, The Netherlands*, v.10, 493 – 502.
- [25] M. Bruglieri, C. Cardani, M. Putzu, (2015). The use of GIS for locating helicopter emergency medical service (HEMS) operating sites. *Proceedings of AIDAA 2015, 17-19 November 2015, Torino*, 1-18.
- [26] M. Bruglieri, F. Bruschi, A. Colomi, F. Lia, A. Luè, (2014). A multi-objective time-dependent route planner: a real world application to Milano city. *Transportation Research Procedia, Proceedings of 17th Euro Working Group on Transportation, EWGT 2014, 2-4 July 2014, Sevilla, Spain*, v.3, 460 – 469.
- [27] M. Bruglieri, D. Ciccarelli, A. Colomi, F. Lia, A. Luè, (2013). A multi-objective route planner: a real world application to Milano city. *Proceedings of EURO Conference, 1-4 July 2013, Rome (Italy)*.
- [28] M. Bruglieri, P. Cappanera, M. Nonato (2013). Hazmat Routing by Compulsory Checkpoints: a New Risk Mitigation Policy, *Proceedings of TRISTAN VIII Triennial Symposium on Transportation Analysis, 9-14 June 2013, San Pedro de Atacama (Chile)*, 1-5.
- [29] M. Bruglieri, A. Colomi, T. Davidovic, S. Roksandic (2012). A Matheuristic Approach for the University Carpooling Problem. *Proceedings of CTW 2012, 29-31 May 2012, Munich (Germany)*, 46-50.
- [30] E. Amaldi, M. Bruglieri, R. Maja, A. Laurita (2012). A Lagrangean Decomposition for Tunnel Interdiction in Hazmat Transportation, *Proceedings of Odysseus 2012, 5th International Workshop on Freight Transportation and Logistics, 21-25 May 2012, Mykonos (Greece)*, 1-4.
- [31] M. Bruglieri, P. Cappanera, M. Nonato (2011). The gateway location problem for hazardous material transportation. *Proceedings of CTW2011, Frascati 14-16 June 2011*: 88-92
- [32] M. Bruglieri, T. Davidovic, S. Roksandic, (2011) Optimization of trips to the university: a new algorithm for a carpooling service based on the Variable Neighborhood Search, *Proceedings of REACT2011, 16-17 May 2011, Belgrade (Serbia)*, 191-199, 2011.
- [33] M. Bruglieri, D.Ciccarelli, A. Colomi, A. Luè (2011). A Carpooling Service for Universities: A Case Study in Milan. *Proceedings of IFORS 2011 Conference for the International Federation of Operation Research, 10-15 July 2011, Melbourne (Australia)*, 90.
- [34] M. Bruglieri, A. Colomi, A. Luè (2010). A web-based carpooling service for universities: A Case Study in Milan. *Proceedings of EURO XXIV, 11-14 July 2010, Lisbon (Portugal)*, 241
- [35] M. Bruglieri, A. Colomi, A. Luè (2009). The Parking Warden Tour Problem. *Proceedings of CTW2009, 2-4 June 2009, Paris (France)*: 11-15

- [36] Bruglieri M., Lulli G., Romauch M., (2006). *Metaheuristics and SDP bounds to identify Gene Regulatory Networks*. Proceedings of Workshop on Networks in Computational Biology, Institute of Applied Mathematics, Middle East Technical University.
- [37] Aringhieri R., Bruglieri M., Davidovic T., and Nonato M., (2005). *A Variable Neighborhood Search for solving a real life waste collection problem*. In Proceedings of XVIII Mini EURO Conference on VNS, Tenerife (Spain).

#### **Books**

- [38] M.Bruglieri, A.Colomi, (2012). *Ricerca Operativa, Zanichelli*.