Daniele Manerba, Ph.D. – Academic CV

Born in Brescia (Italy), 1983.
Italian.
Male.

Affiliation: Dept. of Information Engineering (DII) – Università degli Studi di Brescia (Italy)
Position: Assistant Professor (RTD B) in Operational Research (MAT/09). Since 30/11/2019

Contacts:
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Academic web profiles:
- Scopus: https://www.scopus.com/authid/detail.uri?authorId=55220200300
- GoogleScholar: https://scholar.google.it/citations?user=pXW63_QAAAAJ
- ResearchGate: https://www.researchgate.net/profile/Daniele_Manerba
- Publons: http://publons.com/a/1404480/

Abilitazione Scientifica Nazionale:

Previous affiliations:
- 2017 - 2019: Dept. of Control and Computer Engineering, Politecnico di Torino, Italy.
- 2010 - 2016: Dept. of Information Engineering, University of Brescia, Italy.

Research interests:
- Integer Programming / Combinatorial Optimization / Polyhedral combinatorics
- Branch-and-cut, Branch-and-price, Meta-heuristics, Matheuristics
- Optimization under uncertainty / Stochastic Programming / Deterministic Approximations
- Distribution Logistics, Vehicle Routing Problems
- Procurement Logistics / Supplier selection / Discount policies
- Energy Management / Virtual Power Plant optimization
- Home Healthcare Logistics / Nurse routing and scheduling
- Network Optimization / Inter-modal and Synchro-modal Logistics / Location-Transshipment
- Facility Location

Last update: 30/09/2020
**Publications**

*Articles in international journals*


**Contributes or chapters in volumes**


**Conference papers/proceedings (of selective peer-reviewed conferences)**


Abstracts in journal


Doctoral thesis


Technical reports


Under revision:

47. R. Kain, D. Manerba, R. Tadei. Index Selection Problem via a Generalized Capacitated Facility Location Approach [JOURNAL ARTICLE, I round review]


Conferences / Dissemination
Speaker at national and international selective conferences


*Co-author of works presented at national and international selective conferences (speaker underlined)*


**Posters presented**


**Organization Committee of conferences:**

- AIRO 2011 - Operational Research in Transportation and Logistics. September 6-9, 2011. Brescia, Italy [Local committee/Staff]

**Chair/Organizer of conference sessions:**


**Seminars**

- April 2013 – “Polyhedral Analysis and Integer Linear Programming” (8 hours). Within the course “Algoritmi di ottimizzazione”, Prof. R. Mansini. University of Brescia, Italy.
- March 2012 - “Cplex: optimal solution of MILP problems” (4 hours). Within the course “Ricerca Operativa”, Prof. R. Mansini. University of Brescia, Italy.

**Chair of seminars:**

- E. Fadda: Optimizing production flows in FCA. *Politecnico di Torino*, May 8, 2019. Turin (Italy)
Professional experiences and collaborations

Current position:

- Senior Assistant Professor in Operational Research (MAT/09) at Dept. of Information Engineering, Università degli Studi di Brescia, Italy. [Ricercatore a Tempo Determinato di cui all'art. 24, comma 3, lettera b), della Legge n. 240/2010]
- External teacher [Docente esterno/collaboratore didattico] at Dept. of Control and Computer Engineering, Politecnico di Torino, Italy. 30/11/2019 – 31/12/2020

Previous contracts and positions:

- 09/01/2017 – 29/11/2019. Assistant Professor in Operational Research (MAT/09) at Dept. of Control and Computer Engineering, Politecnico di Torino, Italy. [Ricercatore a Tempo Determinato di cui all'art. 24, comma 3, lettera b), della Legge n. 240/2010]
- 01/10/2015 – 31/12/2015. Post-doc research fellow (MAT/09, Operational Research) at Department of Information Engineering - University of Brescia. Subject: “Analysis and optimization of the colo-rectal cancer therapy process”. [Borsa di ricerca post-dottorato]

Laboratory responsibility:

- [01/2017 – 10/2019]. Responsible for the research laboratory LAB8, Dept. of Control and Computer Engineering, Politecnico di Torino. The lab hosts the ORO (Operational Research and Optimization) group and the SRG (Speech Recognition Group). Webpage: [http://www.daui.polito.it/it/il_dipartimento/strutture_interne/lab_8_research_laboratory](http://www.daui.polito.it/it/il_dipartimento/strutture_interne/lab_8_research_laboratory)

Member of research groups:

- OR@DII – Operations Research group at Dept. of Information Engineering, University of Brescia ([http://or-dii.unibs.it/](http://or-dii.unibs.it/)). Director: Prof. Renata Mansini
- OROgroup – Operations Research group at Dept. of Control and Computer Engineering, Politecnico di Torino ([http://www.orgroup.polito.it](http://www.orgroup.polito.it)). Director: Prof. Roberto Tadei
- ICELAB - ICT for City Logistics and Enterprises Lab ([http://icelab.polito.it](http://icelab.polito.it)). Directors: Prof. Guido Perboli and Edoardo Calia

Memberships of research communities:

- AIRO – Italian Association of Operational Research (sezioni tematiche “Programmazione Stocastica” e “AIRO Young”)
- EU/ME – European working group on Metaheuristics
- VeRoLog – EURO working group on Vehicle Routing and Logistics Optimization
• EWGSO - EURO working group on Stochastic Optimization

**International collaborations and experiences**


- Stable international collaborations with:
  - Michel Gendreau (Polytechnique du Montréal, CIRRELT)
  - Jorge Riera-Ledesma (Universidad de la Laguna, Spain)
  - Saïd Hanafi (University of Valenciennes and Hainaut-Cambresis, France)
  - Denise Holfeld, Axel Simroth (Fraunhofer Institute IVI of Dresden, Germany)
  - Jean-François Côté (Université Laval, Canada)
  - David Pisinger (Technical University of Denmark)
  - Sandra U. Ngueveu (Université de Toulouse - LAAS-CNRS, France)
  - Seyed Hamid Reza Pasandideh (Kharazmi University of Tehran, Iran)
  - Theodor Gabriel Crainic (Université du Québec à Montréal, CIRRELT)
Editorial and refereeing activity:

Editorial responsibilities:
Guest Editor of the Special Issue “Sustainability in Synchro-Modal Logistics and Transportation” for the journal “Sustainability” (ISSN 2071-1050, MDPI), with Prof. A. Caris

Reviewer for international scientific journals (more than 135 revisions):

Verifiable at: https://publons.com/researcher/1404480/daniele-mannerba/peer-review/

Reviewer for international scientific conferences:

Verifiable at: https://publons.com/researcher/1404480/daniele-mannerba/peer-review/

Reviewer for the “MATHSCINET- Mathematical Reviews” database (American Mathematical Society).
Verifiable at: https://mathscinet.ams.org/mathscinet/search/publications.html?pg1=RVRI&s1=987783&pg3=authreviews
Prizes, awards, invitations


- “Elsevier Outstanding Reviewer” for:
  - Computers & Operations Research
  - European Journal of Operational Research
  - Transportation Research Part E: Logistics and Transportation Review


- “Starting Grant” of 15,000€ for the Assistant Professor position from Dept. of Control and Computer Engineering, Politecnico di Torino. January 2017.

- EU/ME sponsored grant of 1000€ to attend the “VRP2013: European Spring School on Vehicle Routing”. Coordinators: Prof. Jorge E. Mendoza and Christelle Guéret. May 20-24, 2013. Angers, France. The selection, among more than 20 participants, was based on the CV (http://www.ima.uco.fr/vrp2013/)
National and International Research Projects

Scientific responsibility:

  
  Scientific coordinator of two working packages of the project:
  
  - WP5: Supply Chain De-Stressing Simulator & eco-NET (from 02/2017 to 04/2018);

Partecipation in national and international projects:


- **S.I.N. - Social INnovation (00665), Virtual eGateway (Gateway domestico per la gestione interattiva dei flussi di energia).** Leader: Università degli Studi di Brescia. Mar 2015 – Feb 2019.


Partecipation in contracts:

Teaching activities

Main teaching and responsibility [Docente e Titolare del corso]:


Teaching [Docente e Membro della commissione d’esame]:

- Course: “Ottimizzazione per il Problem Solving”, Prof. R. Tadei. Corso Di Laurea In Ingegneria Informatica/Meccanica/Gestionale/altri e Corso Di Laurea In Matematica Per L’Ingegneria (6 cfu); Politecnico di Torino. 2016/2017 [21 hours, Italian], 2018/2019 [18 hours, Italian], 2019/2020 [15 hours, Italian]


Teaching support [Contratto di supporto alla didattica ”):

- Course: “Ricerca Operativa”, Prof.ssa R. Mansini. Corso Di Laurea In Ingegneria Informatica e Corso Di Laurea In Ingegneria Gestionale (6 cfu). Università degli Studi di Brescia. 2011/2012 [15 hours, Italian], 2013/2014 [25 hours, Italian], 2014/2015 [40 hours, Italian], 2015/2016 [50 hours, Italian]


Member of:

- CCSA di Ingegneria Industriale – Università degli Studi di Brescia (From 2019/2020 to present)
- Collegio dei Docenti di Ingegneria Elettronica, delle Telecomunicazioni e Fisica (ETF) - Politecnico di Torino (From 2017/2018 to 2019/2020)
- Collegio dei Docenti di Ingegneria Matematica - Politecnico di Torino (From 2017/2018 to 2019/2020)
- Collegio dei Docenti di Ingegneria Informatica, del Cinema e Meccatronica (ICM) - Politecnico di Torino (From 2017/2018 to 2019/2020)

Ph.D. courses:


Ph.D. student's supervision:

Thesis supervisor:

Thesis co-supervisor:

Academic supervisor of curricular stages:
Curriculum studiorum

Academic degrees:

- November 2007 – Bachelor Degree in Information Engineering [Laurea Triennale In Ingegneria dell’Informazione], University of Brescia. Thesis: “A web application for maintaining and programming a DNS server”. Supervisors: Prof. Marina Zanella, Prof. Paolo Prandini.

Ph.D. schools/courses attended

- “VRP2013: European Spring School on Vehicle Routing”, 25.5 hours course with Professors Daniele Vigo, Christian Prins, Dominique Feillet, Victor Pillac and Michel Gendreau. Université Catholique de l'Ouest (Angers, France - 2013)
- “Optimization on graphs”, 20 hours course with Prof. Giovanni Righini. University of Milano (Milano, Italy - 2013)
- “Stochastic programming”, 25 hours course with Prof. Lewis Ntaimo and Prof. Guglielmo Lulli. University of Milano-Bicocca (Milano, Italy - 2012)

Other courses attended:

- “Formazione e innovazione della didattica”. University of Brescia (Brescia, Italy - 2020). Prof. Domenico Simeone
- “Learning and teaching in Higher Education”, 40 hours course with Prof. Ettore Felisatti, Prof. Carla Salvaterra, Prof. Joellen Coryell, Prof. Maria Cinque, Dr. Anna Serbati and Dr. Beatrice Zucchi. Politecnico di Torino (Turin, Italy - 2017)
- “Governo dei sistemi informativi”, 60 hours course with Prof. G. Guida. Università degli Studi di Brescia, Italy (2012/2013)
- “Programmazione Web”, 60 hours course with Prof. D. Bianchini. Università degli Studi di Brescia, Italy (2012/2013)
Technical skills

Competencies:
- Development, implementation, and validation of Mathematical Programming models and algorithms (exact, heuristic, metaheuristic, matheuristic) for optimization problems
- Writing and revising of scientific papers, project deliverables, and project proposal
- Development and implementation of machine learning techniques
- Development and implementation of relational databases, websites, and web applications

Programming languages:
- [Advanced] C/C++, Java, PHP, HTML, CSS, MySQL
- JavaScript, ASP, Python, Turbo Pascal, VBA

Optimization software and packages:
- [Advanced] IBM ILOG Cplex (and its Concert Technology), MPL, PO.R.T.A.
- GUROBI, GAMS, CONCORDE, ExcelSolver

Operating systems:
- [Advanced] Windows, GNU Linux
- Android

Others:
- [Advanced] Latex Editing, Microsoft Office suite / Open Office (Excel, Word, PowerPoint, Access)
- Shell/Bash scripting
- MATLAB/Simulink
- Photo and video editing (Photoshop, Pinnacle Studio, Premiere, Fireworks)
- QGIS

Communication and management skills

Languages:
- Italian [MOTHER TONGUE]
- English:

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<tr>
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<th>Europass level (self-assessment):</th>
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<tbody>
<tr>
<td>Comprehension (listening)</td>
<td>C1</td>
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<tr>
<td>Comprehension (reading)</td>
<td>C2</td>
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<tr>
<td>Speaking (interaction)</td>
<td>C1</td>
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<tr>
<td>Speaking (oral production)</td>
<td>C1</td>
</tr>
<tr>
<td>Writing</td>
<td>C1</td>
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Social skills:
- Excellent interaction with other professionals (researcher, practitioners) in the OR field
- Good interaction with customers, industrial partners, or other professionals not expert in the OR field

Organization skills:
- Excellent experience in organizing time and resources to deal with deadlines and priorities
- Excellent experience in collaborating for the development of small, medium, and large projects
- Good experience in working independently and without supervision
- Good experience in coordinating other people as well as supervising stages, Bachelor, Master, and Ph.D. students.