

Curriculum vitae et studiorum

Daniele Vigo – October, 2015

Curriculum vitae

Daniele Vigo was born in Milano, Italy, on May 23, 1963.

On March, 22nd, 1989 he got the Ms Degree in Electronic Engineering from the University of Bologna.

On November 1, 1989, he started the Ph.D. program in Systems Engineering at the Department of Electronics, Computer Science and Systems of the University of Bologna, under the supervision of Proff. Paolo Toth and Silvano Martello. On September 9, 1993, he successfully discussed the dissertation “*Algoritmi Esatti ed Approssimati per Problemi di Routing e di Scheduling*” (*Exact and Heuristic Algorithms for Routing and Scheduling Problems*), and obtained the Ph.D. in Systems Engineering.

On October 1, 1994, he was incorporated in the Researcher category of the Faculty of Engineering of the University of Bologna. On October 1, 1997 he was nominated Confirmed Researcher.

On November 1, 1998 he was nominated Associate Professor of Operations Research at the Faculty of Engineering of the University of Bologna.

On December, 2001, he obtained the habilitation to the position of Full Professor.

On January, 2004, he was nominated Full Professor of Operations Research at the 2nd Faculty of Engineering of the University of Bologna.

Daniele Vigo is married and has two sons.

In addition to Italian, Daniele Vigo speaks good English, French and Spanish.

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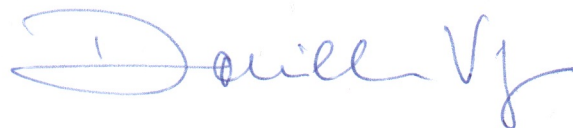
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Research activity

The scientific and research activities of Daniele Vigo have been mainly devoted to the design and analysis of models and algorithms for Combinatorial Optimization problems.

The overall results of the research activity of Daniele Vigo appear in almost 100 papers and book chapters (25 in the last five years) published by the most prestigious journals and book series in the Operations Research and Management Science field. The bibliometric indexes of Daniele Vigo (as for January, 2015) are very high for his discipline sector both in Italy, where he is one of the most productive OR scientist in the last decade, and at the international level:

- Google Scholar H-index = 40 (35 from 2010) with almost 9500 citations (5700 from 2010).
- Scopus h-index = 27 with more than 2600 citations.

From a methodological point of view the research has considered both exact techniques, based on Dynamic Programming, Branch-and-Bound and Branch-and-Cut, and heuristic and metaheuristic techniques. In recent years Daniele Vigo has also performed a vast activity of literature survey on packing and routing problems. This latter research led to the preparation of several papers and book contributions and an edited book on VRP, with Paolo Toth, ([105]), published in the prestigious Discrete Mathematics and Applications series of S.I.A.M. The second edition of the book ([106]) was published by SIAM in 2014.

He is the coordinator of the PhD program in Automatic and Operations Research at DEI, University of Bologna up to its final closing in 2016.

He was supervisor of the PhD thesis of Maria Battarra, currently associate professor at the University of Bath (U.K.) and Chiara Bordin, currently at SINTEF, Norway. He was co-supervisor of the PhD thesis of

- Andreas Stenger at the Goethe University, Frankfurt, Germany;
- Michael Schneider, University of Kaiserslautern, Germany;
- Ana Dolores Lopez Sanchez, Universidad Pablo de Olavide, Seville, Spain.

He is supervising the PhD theses of Matteo Gambella, Stefano Novellani, Selini Hadjidimitriou, Alberto Santini, Christian Doppstadt, (Co-supervision, University of Frankfurt) and Andrea Bessi.

He was responsible of more than 12 yearly research grants in the period 2017-2013 either funded by research project or by the university of Bologna.

International activity

During August-September 1994 he was visiting scientist at the Eindhoven Technical University (Netherlands) with a grant of the “Human Capital and Mobility” European Community program. During July-August 1996 he was visiting scientist at the Centre de Recherche sur les Transports of the University of Montréal (Canada).

In November 1996 visited the József Attila University of Szeged (Hungary) with a grant of a bilateral collaboration between Italy and Hungary.

In 2010-2014 he was Visiting Professor at the Goethe University, Frankfurt, Germany, where he conducted regular research and teaching activity.

Since 2011 he is Visiting Professor at the University of Kaiserslautern, Germany, where he conducts regular research and teaching activity.

Since September 2014 he is Visiting Professor at the Vrije Universiteit Amsterdam, Netherlands, where he conducts regular research.

He is founder and coordinator of the EURO Working Group VeRoLog on Vehicle Routing and Logistics Optimization (www.verolog.eu), with more than 1000 members worldwide.

He was Vice-President of AIRO the Italian Operations Research Society and member of the scientific committee of the Centro Interuniversitario per la Ricerca Operativa (C.I.R.O.). From 2011-2014 he was director of the Centro di Formazione AIRU, the training centre for the Italian Urban Heating Association (AIRU).

He will be president of the Italian Operational Research Society from 2016 to 2019.

He regularly carries out intense seminar activity in important national, European and extra-European universities.

He was responsible for the international activities at the Second Faculty of Engineering from its creation since the closing of activities in October 2012.

Conferences and editorial activity

Daniele Vigo took part in numerous national and international conferences, often organizing and chairing sessions and in some cases as invited speaker. In particular, recently he was:

- Stream organizer at the EURO Conferences, held in Reykjavik 2006, Vilnius 2012, Rome 2013, Barcelona (IFORS) 2014 and Glasgow 2015.
- Member of the program committee of the Odysseus Meeting in 2007, 2009, 2012 and 2015.
- Member of the program committee of the Tristan 2010 and Tristan 2013 conference.
- Member of the program committee of the EURO 2015 conference in Glasgow.
- Chair of the organizing committee of the first Verolog conference, held in Bologna, June 18-20, 2012.
- Member of the program committee of the Verolog 2013, 2014 and 2015 conferences.
- Member of the jury of the EURO/EJOR Best Papers Award 2014-2015.
- Program Chair of EURO 2016 conference in Poznan.

In the period 2000-2002 he was Associate Editor for the Transportation area of *Operations Research*. From may 2002 to 2005 he was Associate Editor for the Transportation area of *Operations Research Letters*.

From 2011 he is member of the advisory board of the *EURO Journal on Transportation and Logistics*.

From 2014 he is Associate Editor of *Journal of Coordination Science*.

From January 2015 he is Associate Editor of *Transportation Science*.

He was member of the evaluation committee for PhD theses or Professorship Habilitation at the Universities of Montreal, Copenhagen, Salerno, Modena-Reggio Emilia, Vienna, Barcelona, Troyes, Kaiserslautern, Toulouse, Nantes and Bologna.

Projects and professional activity

He has carried out research for a bilateral Italy-Hungary project, for the European Community Projects TRIO and TRIS on Railway Crew Management, for the Italian C.N.R. Project on Parallel Computing, the C.N.R. Project on Computer Science, the C.N.R. Project on Transportation and various Ministry of University national projects, both as researcher and in charge of operative units. He is member of the research unit holding a contract with the Italian State Railway Company for the development of optimization software for Crew Management.

He was responsible of the DEIS Unit and WP coordinator in the European Project IUWMM (Integrated Urban Waste Management Model) from 2004 to 2007 (Interreg III/C) with unit budget of 142KEuro and net funding of 121KEuro.

He was responsible of the DEIS unit in the National Project RACCORSU on waste management software from 2006 to 2009 with unit budget of 205KEuro and net funding of 141KEuro.

He is responsible of the DEI Unit of European JPI project E4-Share (2015-17) on electric car sharing with net funding of 130K Euro.

He is responsible of the DEI Unit of National SmartCity Project RIGERS (2014-17) with net funding of 230K Euro.

He was responsible of various applied research contracts financed by important industries and public bodies (Municipality of Bologna, HERA SpA, Geovest, Emilia-Romagna Regional Authority, Alstom railway division ...) totaling about 300KEuro of net funding and further 100KEuro of professional services in the last 7 years.

In 2007 he was one of the founder of Optit srl, a spinoff company working in the development of software tools based on optimization algorithms for logistics and industrial applications (www.optit.net).

List of publications by Daniele Vigo

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- [2] D. Vigo. *Algoritmi Esatti ed Approssimati per Problemi di Routing e di Scheduling*. Tesi per il conseguimento del titolo di dottore di ricerca in ingegneria dei sistemi (phd thesis), D.E.I.S. – Università di Bologna, 1993.
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- [17] P. Toth and D. Vigo. Heuristic algorithms for the handicapped persons transportation problem. *Transportation Science*, 31:60–71, 1997.
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