Curriculum Vitæ

Personal informations

Name	Veronica Dal Sasso
Date of birth	November 9th, 1989
Address	Via Pirano 20 36100 Vicenza Italy
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Working experience

05/2018 – current	**Operations Research Scientist at Optrail** Viale Marco Polo 59, 00154 Roma, Italy http://www.optrail.com

Academic experience

03/2019	Member of the Organizing Commitee for the **3rd AIROYoung Workshop and 1st PhD School**, Rome, 26-29th March 2019
01/2017 – 02/18	**Research Associate at Lancaster University Management School** Centre for Transportation and Logistics (CENTRAL) Research topic: *Air traffic flow management under the TBO concept* The Optiframe project is founded by the European Commission within the SESAR 2020 project
09/2016	Co-founder of **AIROYoung**, the youth chapter of the Italian Operations Research Association
10/2014 – 01/2015	Teaching assistant for the course "Metodi e modelli di Ottimizzazione Combinatoria" - Università degli Studi di Padova
10/2014 – 01/2015	Teaching assistant for the course "Ricerca Operativa" - Università degli Studi di Padova

Research and Development

- application of operations research methods for solving a Delay Management problem: when a vehicle of a public transport network is delayed, the network manager needs to decide whether connecting vehicles should wait for the delayed one or they should leave on time dropping that connection. A solution to this problem is seeked in order to minimize the passengers' discomfort.
- development of a heuristic algorithm to potentially schedule all the flights across Europe on one day of operations: the OptiFrame project aims at incorporating the Trajectory Based Operations concept to schedule all flights across Europe. The concept is based on the sharing of

trajectories among airlines to ensure predictability and security of flights, in order to cope with EUROCONTROL forecast of a 50% increase in air traffic by 2035.

- application of methods to solve large-scale problems to the Haplotype Inference by Pure Parsimony problem. This is a computational biology problem that aims at recovering the set of minimum cardinality of single nucleotides chains that can be used to build a given set of double nucleotide chains which present ambiguities.
- implementation of C++ libraries to build and solve mathematical optimization models.

Education

10/2015 – 03/2016	Visiting researcher under the supervision of prof. Martine Labbé Université Libre de Bruxelles Campus de la Plaine, Bat.NO, Boulevard du Triomphe, 1050 Bruxelles http://www.ulb.ac.be/rech/inventaire/unites/ULB604.html
01/2014-12/2016	**PhD degree** under the supervision of dott. Luigi De Giovanni Università degli Studi di Padova Via 8 Febbraio, 2 - 35122 Padova - Italy http://www.math.unipd.it Subject of the thesis: *A branch-and-price approach for Pure Parsimony haplotyping*
10/2011–10/2013	**Master Course in Mathematics** Università degli Studi di Padova Grade: 110/110 cum laude Subject of the thesis: *Integer programming models and methods for Delay Management in public transportation*
09/2012 – 01/2013	**LLP Program - Erasmus at Cardiff University, Wales** http://www.cardiff.ac.uk
10/2008 – 07/2011	**Bachelor Degree in Mathematics - ISCED5A** Università degli Studi di Padova Grade: 107/110 Subject of the thesis: *Market designs for CO_2 emissions reduction*
09/2003 – 07/2008	**Secondary School Diploma - ISCED3A** Liceo Scientifico G.B.Quadri (Vicenza) Via Carducci 17 - 36100 Vicenza - Italy http://www.liceoquadri.it Grade: 100/100 cum laude Main subjects: Math, Phisics
06/2007 –07/2007	**Leonardo Da Vinci Project** 1 week English language course 3 weeks internship in Oxfam bookshop, 34 Strutton Ground, London

Publications

Dal Sasso, V.; De Giovanni, L.; Labbé, M.;*A Column Generation Approach for Pure Parsimony Haplotyping*, 5th Student Conference on Operational Research (SCOR 2016), OpenAccess Series in Informatics (OASIcs) (2016)

Dal Sasso, V.; Djeumou Fomeni, F.; Lulli, G.; Murgese, G.; Zografos, K., *A Multi-Objective Integer Approach for Optimizing Trajectory Based Operations (TBO)*, Paper presented at Annual Meeting of the Transportation Research Board (TRB), Washington, D.C, United States (2018)

Dal Sasso, V; Djeumou Fomeni, F.; Lulli, G.; Zografos, K., *Incorporating Stakeholders' priorities and preferences in 4D trajectory optimization*, Transportation Research Part B, 117 A, pp. 594-609 (2018)

Dal Sasso, V; Djeumou Fomeni, F.; Lulli, G.; Zografos, K., *Planning efficient 4D trajectories in Air Traffic Flow Management*, European Journal of Operational Research, 276(2), pp. 676-687 (2019)

Dal Sasso, V.; De Giovanni, L.; Labbé, M.;*Strengthened Formulations and Valid Inequalities for Delay Management in Public Transportation*, accepted by Transportation Science

Personal skills and competences

Languages	
Italian	Mother tongue
English	Fluent
Computer skills	
Programming languages	C, C++ Python
Programs	Mathematica Matlab Latex Ampl Gams IBM Cplex (Python libraries) SCIP (C++ libraries) Microsoft Office SQL (basics)
Achievements	
09/2008	Winner of one of the 40 national INDAM scholarships
03/2008	4th place in "Giochi Matematici" at provincial qualifying stage
03/2005	5th place in "Olimpiadi della Matematica" at provincial qualifying stage 3rd place in "Giochi Matematici" at provincial qualifying stage

Curriculum Vitæ updated on March 10, 2019

Dichiarazione sostitutiva di certificazione e dichiarazione sostitutiva dell'atto di notorietà rese ai sensi degli artt. 46 e 47 del DPR 445 del 28/12/2000