Alberto Santini

Contacts Email: alberto.santini@upf.edu

Website: santini.in

Affiliation ESSEC Business School, France

Department of Information Systems, Decision Sciences and Statistics Marie-Skłodowska Curie Fellow (MSCA Cofund EUTOPIA-SIF)

Other affiliations

Institute for Advanced Studies, Cergy Paris Université, France

ons Affiliate Professor

Barcelona School of Management, Spain

Professor

Barcelona Graduate School of Mathematics, Spain

Affiliate professor

Barcelona Graduate School of Economics, Spain

Affiliate professor

RWTH Aachen University Business School, Germany

Lecturer

Past Positions

2017–2021 Universitat Pompeu Fabra, Spain

Department of Economics and Business

Tenure-track assistant professor (currently on leave) and "Juan de la Cierva" researcher

2017 RWTH Aachen, Germany

Deutsche Post Chair for the Optimisation of Distribution Networks

Postdoctoral Researcher, under Prof. Michael Schneider

Education

2014–16 University of Bologna, Italy

Ph.D. in Automatic Control and Operational Research

Supervisors: Silvano Martello, Daniele Vigo

2011–13 University of Copenhagen, Denmark

M.Sc. in Mathematics, part of the Master of Excellence programme Thesis advisors: Stefan Røpke and Louise Kallehague. Mark: 12/12

2008–10 University of Catania, Italy

B.Sc. in Mathematics

Thesis advisor: Angelo Bella. Mark: 110/110 summa cum laude

2002-07 Liceo Scientifico "A. Volta", Caltanissetta, Italy

Scientific Diploma Mark: 100/100

Publications Journal papers

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- 1. Christian Blum, Marko Djukanovic, Alberto Santini, Hua Jiang, Chu-Min Li, Felip Manyà, and Günter Raidl (2021). "Solving common longest subsequence problems via a transformation to the maximum clique problem". In: Computers & Operations Research 125. DOI: 10.1016/j.cor.2020.105089
- 2. Alberto Santini, Michael Schneider, Enrico Bartolini, and Vinicius Greco de Lemos (2021). "The crop growth scheduling problem in vertical farming". In: *European Journal of Operational Research* 294 (1), pp. 377–390. DOI: 10.1016/j.ejor.2021.01.034
- 3. Alberto Santini (2021). "Optimising the assignment of swabs and reagents for PCR testing during a viral epidemic". In: Omega 102. DOI: 10.1016/j.omega.2020.102341

2020

4. Renata Turkeš, Kenneth Sörensen, Lars Magnus Hvattum, Eva Barrena, Hayet Chentli, Leandro Coelho, Iman Dayarian, Axel Grimault, Anders Gullhav, Çağatay Iris, Merve Keskin, Alexander Kiefer, Richard Martin Lusby, Geraldo Regis Mauri, Marcela Monroy-Licht, Sophie Parragh, Juan-Pablo Riquelme-Rodríguez, Alberto Santini, Vínicius Gandra Martins Santos, and Charles Thomas (2020). "Data for a meta-analysis of the adaptive layer in adaptive large neighborhood search". In: *Data in Brief* 33. doi: 10.1016/j.dib.2020. 106568

2019

- 5. Alberto Santini (2019). "An Adaptive Large Neighbourhood Search algorithm for the Orienteering Problem". In: *Expert Systems with Applications* 123, pp. 154–167. DOI: 10.1016/j.eswa.2018.12.050
- 6. Denis Cornaz, Fabio Furini, Enrico Malaguti, and Alberto Santini (2019). "A note on selective line-graphs and partition colorings". In: *Operations Research Letters* 47 (6), pp. 565–568. doi: 10.1016/j.orl.2019.08.005

2018

- 7. Enrico Malaguti, Silvano Martello, and Alberto Santini (2018). "The Traveling Salesman Problem with Pickups, Deliveries, and Draft Limits". In: Omega 74, pp. 50–58. DOI: 10.1016/j.omega.2017.01.005
- 8. Fabio Furini, Enrico Malaguti, and Alberto Santini (2018). "An Exact Algorithm for the Partition Coloring Problem". In: Computers & Operations Research 92, pp. 170–181. DOI: 10.1016/j.cor.2017.12.019
- 9. Alberto Santini, Stefan Ropke, and Lars Magnus Hvattum (2018). "A comparison of acceptance criteria for the Adaptive Large Neighbourhood Search metaheuristic". In: *Journal of Heuristics* 24 (5), pp. 783–815. DOI: 10.1007/s10732-018-9377-x

2017

- 10. Alberto Santini, Stefan Ropke, and Christian E.M. Plum (2017). "A branch-and-price approach to the Feeder Network Design Problem". In: *European Journal of Operational Research* 264 (2), pp. 607–622. DOI: 10.1016/j.ejor.2017.06.063
- 11. Andrea Bettinelli, Alberto Santini, and Daniele Vigo (2017). "A real-time conflict solution algorithm for the Train Rescheduling Problem". In: *Transportation Research Part B: Methodological* 106, pp. 237–265. DOI: 10.1016/j.trb.2017.10.005

2015

12. Alberto Santini, Henrik Alsing Friberg, and Stefan Ropke (2015). "A note on a model for quay crane scheduling with non-crossing constraints". In: *Engineering Optimization* 47.6, pp. 860–865. DOI: 10.1080/0305215X.2014.958731

Publications Submitted papers

2021

- 13. Alberto Santini, Ana Viana, Xenia Klimentova, and João Pedroso (2021). "The probabilistic Travelling Salesman Problem with crowdsourcing". In: *Preprint (submitted)*. URL: https://santini.in/files/papers/santini-viana-klimentova-pedroso-2020.pdf
- 14. Alberto Santini, Michael Schneider, Thibaut Vidal, and Daniele Vigo (2021). "Decomposition strategies for vehicle routing heuristics". In: *Preprint (submitted)*. URL: https://santini.in/files/papers/santini-schneider-vidal-vigo-2021.pdf
- 15. Michele Monaci, Ciara Pike-Burke, and Alberto Santini (2021). "The time-bomb knapsack problem". In: *Preprint (submitted)*. URL: https://santini.in/files/papers/monaci-pike-burke-santini-2021.pdf

Publications In preparation

- 2021
- Alberto Santini, Stefan Ropke, and Lars-Magnus Hvattum (2021). "Parallel Adaptive Large Neighbourhood Search". In: In preparation
- 17. Alberto Santini and Maxence Delorme (2021b). "Energy efficient automated Vertical Farming systems". In: *In preparation*

Technical Reports

- 2015
- 18. Valentina Cacchiani, Alberto Santini, and Daniele Vigo (2015). A study on metaheuristic approaches to the energy-efficient Train Timetabling Problem. Tech. rep. OR-15-6. DEI, University of Bologna
- 2014
- 19. Valentina Cacchiani, Alberto Santini, and Daniele Vigo (2014). A novel modelling approach to the Train Timetabling Problem. Tech. rep. OR-14-27. DEI, University of Bologna

Conference Talks

- 2021
- 20. Alberto Santini, Michele Monaci, and Ciara Pike-Burke (2020). "The 0–1 Time-bomb Knapsack Problem". In: 30th European Conference on Operational Research (July 11–14, 2020). Athens, Greece
- 21. Alberto Santini and Maxence Delorme (2021a). "Energy efficient automated vertical farms". In: ODS 2021 (Sept. 14-17, 2021). Rome, Italy
- 2020
- 22. Alberto Santini and Ana Viana (2020). "Crowdsourcing in last-mile delivery: machine learning and heuristic approaches to the Stochastic TSP with Crowdsourcing". In: 5th Conference of Young Researchers of the Royal Spanish Society of Mathematics and Statistics (Jan. 27–31, 2020). Castelló, Spain
- 23. Alberto Santini, Ana Viana, Xenia Klimentova, and João Pedro Pedroso (2020). "Machine learning and heuristic approaches to the Probabilistic TSP with Crowdsourcing". In: 4th AIROYoung Workshop (Feb. 5–7, 2020). Bolzano, Italy
- 2018
- 24. Alberto Santini and Christian Blum (2018). "Solving a class of longest subsequence problems via maximum cliques". In: ODS 2018 (Sept. 10–13, 2018). Taormina, Italy
- 25. Alberto Santini (2018b). "An ALNS heuristic for the Orienteering Problem". In: 29th European Conference on Operational Research (July 8–11, 2018). Valencia, Spain
- Alberto Santini (2018a). "A hybrid Machine Learning and ALNS approach to the Orienteering Problem".
 In: EURO/ALIO International Conference on Applied Combinatorial Optimisation (June 25–27, 2018).
 Bologna, Italy
- 2017
- 27. Alberto Santini, Fabio Furini, and Enrico Malaguti (2017). "Exact and heuristic algorithms for the partition colouring problem". In: ODS 2017 (Sept. 4–7, 2017). Sorrento, Italy
- 2016
- 28. Alberto Santini, Stefan Ropke, and Lars Magnus Hvattum (2016b). "Poster: A comparison of acceptance criteria for the ALNS metaheuristic". In: 46th Annual Conference of the Italian Operational Research Society (Sept. 6–9, 2016). Trieste, Italy
- 29. Alberto Santini, Stefan Ropke, and Lars Magnus Hvattum (2016a). "A comparison of acceptance criteria for the Adaptive Large Neighbourhood Search metaheuristic". In: 28th European Conference on Operational Research (July 3–6, 2016). Poznań, Poland
- 2015
- 30. Alberto Santini, Enrico Malaguti, and Silvano Martello (2015). "A maritime version of the Travelling Salesman Problem". In: Odysseus Conference (May 31–June 5, 2015). Ajaccio, France
- 31. Alberto Santini, Stefan Ropke, and Christian E.M. Plum (2015). "A rich maritime extension of the Vehicle Routing Problem". In: 45th Annual Conference of the Italian Operational Research Society (Sept. 7–10,

2015). Pisa, Italy

2014

32. Alberto Santini, Enrico Malaguti, and Silvano Martello (2014). "The Travelling Salesman Problem with pickup, delivery and draught limits". In: 44th Annual Conference of the Italian Operational Research Society (Sept. 2-5, 2014). Como, Italy

Awards

2018 Omega best paper award

> Won the Best Paper Award for a paper published during 2018 in the journal Omega. The paper was "The Traveling Salesman Problem with Pickup, Deliveries, and Draft Limits".

Grants Personal or as P.I., competitive

2021 Marie Skłodowska-Curie Fellowship

> Within the Marie Skłodowska-Curie Action Cofund (EUTOPIA-SIF), with a project titled "SILD: Sustainable Integrated Last-mile Delivery". Grant to join ESSEC Business School (part of Cergy Paris Université). Academic Supervisor: Claudia Archetti.

Juan de la Cierva Incorporación 2021

Two-year grant from the Spanish government, refused because incompatible with the Marie Skłodowska-Curie fellowship. Ranked 5th out of 28 participants from all areas of Mathematics, with a score of 90/100.

2021 **BGSE Seed Grant**

> To hire a post-doctoral researcher on the topic "Sustainable Last-mile Delivery". Grant awarded by the Barcelona Graduate School of Economics.

2020-21 Planetary Wellbeing research grant

PI of a research proposal with Gara Villalba (Universitat Autonoma de Barcelona) and Michael Schneider (RWTH Aachen University), on the optimisation of vertical farming in Barcelona's public schools. Grant awarded by Universitat Pompeu Fabra.

Juan de la Cierva Formación 2018-20

Two-year grant from the Spanish government. Ranked 1st out of 49 participants from all areas of Mathematics,

with a score of 99/100.

2014-16 Ph.D. grant by the University of Bologna

Ranked 1st out of 9 participants, with a score of 92/100.

Grants As part of a group, competitive

2019 I+D+i 2019 (Retos)

> Part of the group awarded for the project "Optimización logística para el cuidado de la salud en el hogar y los servicios sociales" by the Spanish Ministry of Science.

2016 PRIN (Research Projects of Relevant National Interest) 2016

Part of the group awarded for the project "Transportation and Logistics Optimization in the Era of Big and Open Data".

Grants Other

2021 Visiting Researcher Grant

Granted by the Research Centre of ESSEC Business School.

| 2019 | Yerun Mobility Award To visit University Paris Dauphine, sponsored by YERUN. |
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| 2018–2023 | Association of European Operational Research Societies (EURO) Grant to organise the EUROYoung Workshops. |
| 2018 | Erasmus+ Grant To visit the University of Bologna, through the SmartTransLog consortium. |
| 2017 | COST STSM Grant Short-Term Scientific Mission grant to conduct research at INESC-TEC under COST Action "European Network for Collaboration on Kidney Exchange Programmes". |
| 2016 | Association of European Operational Research Societies (EURO) Grant to organise the "EURO Young Researchers OR Webinars". |
| 2015 | Marco Polo scholarship Grant to conduct research abroad. |

Teaching Ph.D. level

| 2020–21 | Business Analytics for Operations and Marketing Taught in a team. Universitat Pompeu Fabra, first-year course for Ph.D. students (M.Res. in Economics, Finance and Business). |
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| 2018–21 | Research Seminars Taught in a team. Universitat Pompeu Fabra, first-year course for Ph.D. students (M.Res. in Economics, Finance and Business). |

Teaching Master's level

| 2021–22 | Deterministic Models and Optimisation Taught together with Jessica Rodríguez-Pereira. Barcelona Graduate School in Economics, M.Sc. in Data Science, Data Science Methodology Programme. |
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| 2021–22 | Practical Data Science for Finance Barcelona School of Management, Universitat Pompeu Fabra, M.Sc. in Finance and Banking. |
| 2019–22 | Practical Data Science for Management Barcelona School of Management, Universitat Pompeu Fabra, M.Sc. in Management. |
| 2019–21 | Advanced Machine Learning RWTH Business School, M.Sc. in Data Analytics and Decision Science. |
| 2018–19 | Data Science Projects RWTH Business School, M.Sc. in Data Analytics and Decision Science. |
| 2018–21 | Machine Learning RWTH Business School, M.Sc. in Data Analytics and Decision Science. |
| 2017 | Optimisation methods for Big Data Analytics RWTH Aachen, Master's in Management, Business, and Economics. |
| 2014–18 | Optimisation Algorithms (teaching assistant) Course taught by Paolo Toth. University of Bologna, M.Eng. in Computer Engineering. |

Teaching Bachelor's level

| 2021 | Applied Machine Learning and Optimisation Universitat Pompeu Fabra, elective course for all last-year Bachelor's students of the Department of Economics. |
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| 2020 | Applied Optimisation Techniques Universitat Pompeu Fabra, elective course for all last-year Bachelor's students of the Department of Economics. |
| 2019 | Revenue Management and Dynamic Pricing Universitat Pompeu Fabra, elective course for all last-year Bachelor's students of the Department of Economics. |
| 2018–21 | Operations Management Universitat Pompeu Fabra, Bachelor's in International Business Economics. |
| 2018–19 | Operations Management Universitat Pompeu Fabra, Bachelor's in Business Management Administration. |
| 2016–17 | Foundations of OR (teaching assistant) Course taught by Enrico Malaguti and Michele Monaci. University of Bologna, B.Eng. in Management Engineering. |

Academic experience Scientific Organisations

| 2019–2021 | Elected member of the Board of Directors Member of the board of directors of AIRO, the Italian Operational Research Association. |
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| 2018 | Founder Founded EUROYoung, a group of young O.R. scientists from EURO member countries, with the aim of organising training events for early-stage researchers. |
| 2016–18 | Coordinator Coordinator of AIROYoung, the youth chapter of the Italian Operational Research Association. During my tenure as coordinator, I organised two workshops securing funding from Italian and European institutions; I created a database of young talents in O.R. and of open positions, helping matching O.R. scientists with relevant opportunities; I helped enroll new young members into AIRO, from Italy and other European countries. |
| 2016 | Founder |

Founder of AIROYoung, the youth chapter of the Italian Operational Research Association.

Academic experience Organisation of Seminars, Workshops, and Courses

| 2022 | Member of the Organising Committee The 2 nd EUROYoung Workshop. Porto, Portugal, 25–26 June 2022. |
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| 2019 | Organiser of a PhD and Postdoc course Organised a course for PhD and Postdocs of the Barcelona Graduate School of Mathematics, titled "An Introduction to Equilibrium Problems and their applications". The course is taught by Mauro Passacantando. |
| 2019 | Member of the Organising Committee The 1 st EUROYoung Workshop. Invited speakers: Ana Viana and Federico Perea. Seville, Spain, 2–3 May 2019. |
| 2019 | Member of the Organising Committee The 3 rd AIROYoung Workshop and 1 st AIROYoung PhD School. Invited speakers: Teodor Crainic and Endre Boros. Rome, Italy, 26–29 Mar 2019. |
| 2018–19 | Coordinator of the "Operations and Marketing" seminar series This is a series of weekly seminars at the Department of Economics and Business of Universitat Pompeu Fabra. |

with invited speakers from all over the world.

2018 Member of the Organising Committee

The 2nd AIROYoung Workshop, on the theme "Logistics optimisation and applied operational research". Invited speakers: Geir Hasle and Roberto Roberti. Cosenza, Italy, 03–05 Mar 2018.

2017 Workshop Organiser

Organised, together with Lavinia Amorosi, the 1st AIROYoung Workshop, on the theme "Emerging Optimization Problems on Complex Networks". Invited speakers: Justo Puerto and Maria Grazia Scutellà. Rome,

Italy, 16-17 Feb 2017.

2016 EURO Young Researchers OR Webinars Organiser

Organised a series of OR webinars by and for young researchers from all over the world, sponsored by EURO.

2015 Seminars Organiser

Organised of a series of doctoral seminars within the Operational Research group at DEI, University of Bologna, involving local and visiting researchers.

Academic experience Conferences

| 2021 | Member of the Programme Committee (ECON track) GECCO2021, the The Genetic and Evolutionary Computation Conference. Lille, France. |
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| 2020 | Member of the Programme Committee ODS2020, Optimisation and Decision Science 2020 with theme "Optimisation in Artificial Intelligence and Data Science". Rome, Italy. |
| 2020 | Member of the Programme Committee (ECON track) GECCO2020, the The Genetic and Evolutionary Computation Conference. Cancun, Mexico. |
| 2019 | Member of the Programme Committee (ECON track) GECCO2019, the The Genetic and Evolutionary Computation Conference. Prague, Czech Republic. |
| 2019 | Member of the Programme Committee HM2019, the 11 th International Workshop on Hybrid Metaheuristics. Concepción, Chile. |
| 2018 | Member of the Organising Committee and Session Chair ODS 2018, Optimisation and Decision Science Conference. Chair of the "AIROYoung" session. Taormina, Italy. |
| 2018 | Session Chair "EURO Young" session at the EURO 2018 Conference. Valencia, Spain. |
| 2018 | Session Chair "AIROYoung" session at the EURO/ALIO 2018 Conference. Bologna, Italy. |
| 2017 | Session Chair "AIROYoung" session at the ODS 2017, Optimisation and Decision Science Conference. Sorrento, Italy. |
| 2016 | Poster Session Chair "Young OR Researchers Poster Session" at the AIRO 2016 Conference. Trieste, Italy. |
| 2016 | Session Chair "Methodological advancements in metaheuristics" session at the EURO 2016 Conference. Poznan, Poland. |
| 2015 | Session Chair "Exact Methods for Routing Problems" at the AIRO 2015 Conference. Pisa, Italy. |

Academic experience Evaluation Committees

| 2020 | Member of PhD defence committees At several institutions in Europe. |
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| 2018 | Grant proposal evaluator "FONDECYT Initiation into Research" programme, Chilean National Science and Technology Commission. |
| 2018–20 | Member of the permanent M.Sc. thesis defence committee Master's in Statistics and Operational Research, Polytechnic University of Catalunya, Spain. Master's in Management, Barcelona School of Management, Spain. |

Academic experience Visiting Positions

| 2018 | University of Bologna, Italy Visiting Paolo Toth and Daniele Vigo under an Erasmus+ grant from the SmartTransLog consortium. |
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| 2017 | INSEC-TEC, Portugal Visiting as part of a Short-Term Scientific Mission for COST Action "European Network for Collaboration on Kidney Exchange Programmes". Working with Ana Viana, João Pedro Pedroso, and Xenia Klimentova. |
| 2016 | Amazon Inc. Visiting Research Scientist in Seattle, USA. Working with Mauricio Resende and Andrew Goldberg. |
| 2016 | Vrije Universiteit Amsterdam Visiting Ph.D. Student at the Department of Information, Logistics and Innovation. Working with Wout Dullaert. |
| 2015 | University of Calabria Visiting Ph.D. Student at the Department of Mechanical, Energy and Management Engineering. Working with Demetrio Laganà. |
| 2015 | Danish Technical University (DTU) Visiting Ph.D. Student at the Department of Management Engineering. Working with Stefan Røpke. |

Invited talks

| 2021 | "The importance of networking in career development" Invited to the WISDOM round table within the EURO 2021 conference. |
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| 2019 | "Crowdsourcing in last-mile delivery: machine learning and heuristic approaches to the Stochastic TSP with Crowdsourcing." Invited to present at the seminar series of LAMSADE, University Paris Dauphine. |
| 2016 | "A real-time conflict resolution algorithm for the train rescheduling problem." Invited to present at: Vrije Universiteit, Amsterdam (Feb 2016); Danish Technical University (DTU), Kongens Lyngby (Oct 2016); DSB Training Centre, Nyborg (Oct 2016). |
| 2015 | "TSP with pickups, deliveries, and draught limits." University of Bologna. Part of a series of seminars held by Ph.D. students and young researchers. |
| 2014 | "Recent trends in Operational Research and practical business applications." American University of Armenia; series of two seminars at the College of Science and Engineering. |
| 2014 | "Data Enevelopment Analysis and OR applications in measuring efficiency." University of Bologna. Part of the course "Resource Optimization", M.Eng. in Management Engineering. |

Supervised theses

2021 Master's Thesis, M.Sc. in Management, Barcelona School of Management, Universitat Pompeu Fabra

Supervisor, "Micro-economic insights for realistic pricing in the Vehicle Routing Problem with Occasional Drivers", Helena Bonnin.

2020 Master's Thesis, M.Res. in Economics, School of Economics and Business, Universitat Pompeu Fabra

Co-supervisor, "Imitation, Principal Component Analysis, and the Effects of Modifications to eSports on Competitive Balance", Karim Carroum.

Master's Thesis, M.Sc. in Management, Barcelona School of Management, Universitat Pompeu Fabra

Supervisor, "A simulation study of integrated real-time data resulting in a dynamic pricing model for crowdsourcing-to-customer last-mile deliveries", Otis van der Meij.

Project, M.Sc. in Data Analytics and Decision Science, RWTH Business School

Supervisor, "COVID-19 Pandemic: Comparison of forecasting methodologies and affecting factors for fatalities and transmission rates", Peter Yacoub.

Project, M.Sc. in Data Analytics and Decision Science, RWTH Business School

Supervisor, "Machine learning for selective assembly with automatic adaption to use-case complexity", Sourabh Hujare.

Bachelor's Thesis, School of Economics and Business, Universitat Pompeu Fabra

Supervisor, "Congestion tax as the optimal policy tool to minimize congestion in the city of Barcelona", Joel Sanginés-Uriarte Dooly and Adrià Trepat i Izquierdo.

Bachelor's Thesis, School of Economics and Business, Universitat Pompeu Fabra

Supervisor, "Machine Learning for Price Discrimination", Jan Czernek.

2019 Erasmus+ Internship, incoming from the University of Twente

Supervisor, "Production planning and optimisation of vertical farms", Vinicius Greco de Lemos.

Master's Thesis, M.Sc. in Management, Barcelona School of Management, Universitat Pompeu Fabra

Supervisor, "Demand forecasting model in food delivery, a heuristic approach to data science using Python and geoanalysis", Marc Herrera.

2017 Project, M.Sc. in Management, Business, and Economics, RWTH Aachen

Supervisor, "Improving document-level machine translation with word2vec", Sean Eulenberg.

Master's Thesis, M.Sc. in Management, Business, and Economics, RWTH Aachen

Co-supervisor, "A heuristic algorithm for the electric pickup and delivery problem", Lutz Venhofen.

2016 Master's Thesis, M.Eng. in Management Engineering, University of Bologna

Co-supervisor, "Embedding robustness in train rescheduling algorithms", Alessandro Morandi.

Project, M.Eng. in Computer Engineering, University of Bologna

Co-supervisor, "A genetic algorithm for real-time energy optimisation of train timetables", Francesco Di Lella.

2015 Master's Thesis, M.Eng. in Management Engineering, University of Bologna

Co-supervisor, "Metaheuristic algorithms for energy optimisation in train timetabling and rescheduling", Hang Xu.

Project, M.Eng. in Computer Engineering, University of Bologna

Co-supervisor, "A constructive heuristic for the dispatching problem on multi-track territories", Giacomo Dall'Olio and Simone Laierno.

2014 Master's Thesis, M.Eng. in Management Engineering, University of Bologna

Co-supervisor, "Valutazione della Performance di un caso di Customer Contact Desk attraverso l'applicazione della metodologia Data Envelopment Analysis", Martina Carli.

Work experience

2016 Amazon

Research Scientist Intern. Seattle, USA.

2012–13 Procter & Gamble

Strategic Sourcing Intern. Bruxelles, Belgium.

2012 WISON Offshore & Marine

Procurement Trainee. Shanghai, China.

2011–12 Amiiko

Ruby on Rails Developer. Copenhagen, Denmark.

Other

Languages Italian: mothertongue; English: fluent; French: very good; Spanish: very good; Catalan: very good; Arme-

nian: constantly improving!

Volunteering Spanish Red Cross; Italian Red Cross; Danish Red Cross; Big Brother / Big Sister Project Kongelunden, Copen-

hagen, Denmark; Associació per la Promoció del Transport Public, Barcelona, Spain.

Certifications Chartered shipbroker according to Italian law (2012).