Tommaso Mannelli Mazzoli

Curriculum Vitae

Personal Data

born in Florence (Italy), 1993-09-22 Italian Citizenship

Education

Since 2021 Ph.D. Student in Computer Science, TU Wien, Vienna (Austria).

Advisor: Nysret Musliu

2019 – 2020 Master of Science in Mathematical Engineering, Universidad Complutense

Madrid, Madrid (Spain), Double degree.

Advisor: Angel Felipe Ortega

2018 – 2020 Master of Science in Applied Mathematics, University of study, Florence (Italy).

Advisor: Stefania Bellavia

Thesis topic: The Quadratic Assignment Problem, Metaheuristic approaches

Area of Concentration: Combinatorial Optimisation

2013 – 2017 Bachelor of Science in Mathematics, University of study, Florence (Italy).

Advisor: Andrea Colesanti

Thesis topic: "Integration in finite terms: The Liouville's Theorem"

Area of Concentration: Differential Algebra

Research Interests

Metaheuristic methods

Hybridization of Metaheuristics with Exact Methods

Evolutionary Computation

Crew Scheduling Problems (in particular, Bus Driver Scheduling Problem)

Work Experience

Sep – Dec Visiting Scholar, Universidad Autonoma Barcelona, Bellaterra, Spain.

2023

Mar – June Visiting Scholar, University of Melbourne, Melbourne, Australia.

2023

Since 2021 **Project Assistant**, Institute for Logic and Computation, TU Wien, Vienna, Austria.

Funded by FWF project W1260-N35, Vienna Graduate School of Combinatorial Optimization

2017 – 2021 Ambulance rescuer, Humanitas Firenze Nord, Florence (Italy).

2014 – 2019 Academic senator, University of study, Florence (Italy).

2011 - 2021 Maths and Physics's private tutor.

Residence in Foreign Countries

Madrid, Spain Melbourne, Australia Barcelona, Spain September 2019-February 2020 March 2023-June 2023 September 2023-December 2023

Publication(s)

- 2024 Tommaso Mannelli Mazzoli, Lucas Kletzander, Nysret Musliu, Kate Smith-Miles, Instance Space Analysis for the Bus Driver Scheduling, on-going.
- 2024 Tommaso Mannelli Mazzoli, Lucas Kletzander, Nysret Musliu, Pascal Van Hentenrick, Investigating Large Neighbourhood Search for Bus Driver Scheduling, ICAPS 2024, https://doi.org/10.1609/icaps.v34i1.31495.
- 2022 Lucas Kletzander, Tommaso Mannelli Mazzoli, Nysret Musliu, Metaheuristic Algorithms for the Bus Driver Scheduling Problem with Complex Break Constraints, Genetic and Evolutionary Computation Conference (GECCO 2022). https://doi.org/10.1145/3512290.3528876.

Seminars

I held seminars in the following events.

- May 2024 VGSCO Retreat, From starts in the sky to instances in the space.
- Jan 2024 VGSCO Colloquia, Optimisation and Consensus.
- Oct 2023 UAB Seminar, Solving the bus driver scheduling problem.
- Apr 2023 Optima Seminar, Solving the bus driver scheduling problem.
- Jan 2022 VGSCO Colloquia, Metaheuristic Algorithms for Bus Driver Scheduling Problem with Complex Break Constraints.
- Jun 2022 **DBAI Meeting**, Metaheuristic Algorithms for Bus Driver Scheduling Problem with Complex Break Constraints.
- Jun 2022 VGSCO retreat, Tabu Search for Bus Driver Scheduling Problem with hard Break Constraints.
- Jul 2022 **GECCO 2022**, Metaheuristic Algorithms for Bus Driver Scheduling Problem with Complex Break Constraints.
- Nov 2022 **Open Problems Sessions**, Metaheuristic Algorithms for Bus Driver Scheduling Problem with Complex Break Constraints.

Other activities

2022 SIGEVO Summer School (https://gecco-2022.sigevo.org/Summer-School)

Knowledge

- OS GNU Linux, Windows, Android
- Languages Python, Octave, Matlab, Fortran, LATEX, C, Julia, R
 - Software Gams, MiniZinc, SAS, SPSS

Outreach

2022 GECCO volunteer

2016 Gara matematica (Mathematics Contest), Dipartimento di Matematica Ulisse Dini, Florence.

Collaboration in proctoring and grading in an annual contest for high school students.

Languages

Italian Mother Language

English Professional working proficiency

Spanish Professional working proficiency

German Basic

Other Activities

Hobby Interested in Science and technology in general, chess, salsa, bachata.

Others Italian driving license B, AED operator.

Last Update: 1 June 2024