



HAOQI XIE

Nationality: Chinese **Date of birth:** **Phone number:**

Email address: haoqi.xie@edu.unige.it **Skype:** Haoqi Xie

LinkedIn: <https://www.linkedin.com/in/haoqi-xie-ba9313190/>

Work: University of Genova, CIELI, 16121 Genova (Italy)

EDUCATION AND TRAINING

Ph.D.: Logistics and Transportation

University of Genova, Italy [11/2021 – Current]

Courses during first and second Ph.D. years:

- Programming 1 (C++) ----- 8 CFU, 64 hours;
- Programming 2 (Java, Python, algorithms, and data structure) ----- 7 CFU, 56 hours;
- Python Algorithms & Optimization (construction of optimization algorithms using Python and Gurobi) ----- 6 CFU, 48 hours;
- Methods and models for decision support (optimization models, meta-heuristics and matheuristics) ----- 6 CFU, 48 hours;
- Algebra ----- 6 CFU, 48 hours;
- Machine Learning and Data Analysis (essential supervised learning and its intuition, data processing, and data analysis) ----- 6 CFU, 48 hours.

Ph.D. short courses:

- Integer Programming and Combinatorial Optimization ----- 3 CFU, 24 hours

Summer Schools:

- Introduction to research methods ----- 3 days, about 20 hours of lectures;
- Applied statistics using R ----- 1 day, 7 hours of lectures;
- Machine Learning for social scientists ----- 5 days, 25 hours of lectures.

Master's Degree: Maritime and Port Economics and Management (Code: LM-77)

University of Genova, Italy [10/2017 – 09/03/2020]

Short-term courses:

- One-week course in la Escola Europea de Short Sea Shipping (Barcelona);
- One-week workshop in the Hapag-Lloyd (Hamburg).

Thesis:

Optimization models for the yard space in container terminals: the case of Genova Voltri-Prà

Final Votes: 99/110 Average Votes: 24.7/30

Bachelor's Degree: Duplice diploma on Logistics Management and English

SICHUAN International Studies University, Chongqing [08/2012 – 06/2016]

Thesis:

Research on the evaluation of the core competence of the third-party cold chain logistics enterprises

Final votes: 88/100; GPA 3.76/5

WORK EXPERIENCE

Educational Support

University of Genova, Department of Economics [2020 – 2023]

- A.A. 2022----2023: 10 hours for the undergraduate course: Operations Research for Tourism and Revenue Management (code: 83700), Imperia, Italy;
- A.A. 2022----2023: 10 hours for the undergraduate course: Operations Research for the Management (code: 60077), Genova, Italy;
- A.A. 2020----2021: 10 hours for the undergraduate course: Operations Research for the Management (code: 60077), Genova, Italy.

Research Fellow

Italian Center of Excellence on Logistics, Transport and Infrastructures, University of Genova [01/2021 – 06/2021]

City: Genova

Country: Italy

6 months of research fellow in the Italian Center of Excellence on Logistics, Transport and Infrastructures (CIELI) for the research project:

Management of containers in the yard: optimal sequencing of operations of moving equipment

Main work:

- data analysis;
- supporting the evaluation of a decomposition-based heuristic approach.

PROJECTS

Ecosystem RAISE (Robotics and AI for Socio-economic Empowerment), University of Genova, Italy

[2023 – Current]

The project is supported by PNRR, project Ecosystem RAISE

- SPOKE 4 – Sustainable Ports

Main work:

- Literature study on the Machine Learning techniques in container terminals.

Optimization of the distribution of goods and materials for the residential center of Riomaggiore.

[2022 – Current]

Italian Center of Excellence on Logistics, Transport and Infrastructures (CIELI), University of Genova.

Main work:

- Literature study;
- Quantitative study for proposing a potential strategy;
- Elaborating a report and presentation for the municipal of Riomaggiore, Cinque Terre.

LANGUAGE SKILLS

Mother tongue(s): **Chinese**

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Italian (certificate: CILS)

LISTENING C1 READING C1 WRITING B2

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Spanish

LISTENING A2 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Programming skills:

Basic knowledge on Programming: Python, Java, C++ / Basic knowledge on PyTorch and TensorFlow

Optimization skills:

Optimization: GUROBI and CPLEX / Optimization: MPL and LINDO / Simulation environment: Witness

Texting skills:

Microsoft Office / LaTeX

PUBLICATIONS

Ambrosino, D., Xie, H. (2023). A new classification schema for literature reviews on the applications of machine learning and optimization methods in maritime terminals: a focus on the seaside area. ODS 2023, AIRO Springer series.

[Ambrosino D, Xie H. Optimization approaches for defining storage strategies in maritime container terminals\[J\]. *Soft Computing*, 2023, 27\(7\): 4125-4137.](#)

[Ambrosino, D., Xie, H. \(2020\). An Optimization Model for Defining Storage Strategies for Export Yards in Container Terminals: A Case Study. *Lecture Notes in Computer Science*, 12433 LNCS, pp. 119-132.](#)

WORKING PAPERS

A comprehensive literature review on Machine Learning and Operations Research in Seaside area: its application, trends, and research emphasizes

[2023]

Daniela Ambrosino, Haoqi Xie

Working paper for submission to European Journal of Operations Research.

An Optimization Research on Operations Sequence of Reach-stackers in Container Yard.

[2023]

Daniela Ambrosino, Silvia Siri, Haoqi Xie

Working paper for submission to Computers & Operations Research

CONFERENCES AND SEMINARS

International Conference on Optimization and Decision Science ODS 2023

[Ischia, Italy, 04/09/2023 – 07/09/2023]

International Conference on Computational Logistics ICCL 2022

[University of Pompeu Fabra, Barcelona, 21/09/2022 – 23/09/2022]

European Conference on Operational Research EURO Athens 2021

[University of West Attica, Athens (Online), 11/07/2021 – 14/07/2021]

International Conference on Computational Logistics ICCL 2020

[University of Twente, Enschede, The Netherlands (Online), 25/09/2020 – 28/09/2020]