

Charly Lersteau

Developer and Researcher in Operations Research

EXPERIENCE

Project Manager and Developer (1 year)

ADEI 17 Mar 2022 - Feb 2023 France

- Developed a full Electronic Document Management System in PHP / Symfony
- Containerized the software in a Docker image

Research Fellow (2 years)

Huazhong University of Science and Technology Dec 2019 - Dec 2021 China

- Solved crane scheduling and stacking problems with column generation and heuristics
- Directed by Weiming Shen

Research Fellow (2 years ½)

Liverpool John Moores University Jan 2017 - Jun 2019 United Kingdom

- Optimization of container-handling performance in ports
- Anticipating and mitigating reactionary delays in railway networks
- Directed by Trung Thanh Nguyen

Internship (3 months)

University of Salerno Oct 2014 - Dec 2014 Italy

- Solving target tracking problems with wireless sensor networks using column generation
- Directed by Raffaele Cerulli, Andrea Raiconi

Research visit (5 months)

University of Vienna Feb 2013 - Jun 2013 Austria

- On solving the multi-objective facility location problem with single sourcing and capacity constraints
- Directed by Fabien Tricoire, Xavier Gandibleux, Anthony Przybylski

Research work (5 months)

University of Nantes Feb 2012 - Jun 2012 France

- Parallelizing GRASP metaheuristic for the set covering problem
- Directed by Xavier Gandibleux, Anthony Przybylski

EDUCATION

PhD Mathematics, Sciences, Information and Communication Technologies

University of Southern Brittany 2013 - 2016 France

- Optimization of wireless sensor networks for tracking mobile targets
- Directed by Marc Sevaux, André Rossi

MSc Computer Science - Optimisation in Operations Research

University of Nantes 2011 - 2013 France

- Erasmus and Master thesis at University of Vienna, Austria (5 months)
- Erasmus study at Université Libre de Bruxelles, Belgium (5 months)
- Ranked 2nd in the class

BSc Computer Science - Mathematics

University of Nantes 2010 - 2011 France

- Ranked 2nd in the class

PUBLICATIONS

- Lersteau, C., & Shen, W. (2022, October). **A survey of optimization methods for block relocation and PreMarshalling problems**. *Computers & Industrial Engineering*, 172, 108529. URL: <https://doi.org/10.1016/j.cie.2022.108529>
- Lersteau, C., Nguyen, T. T., Thanh Le, T., Nguyen, H. N., & Shen, W. (2021). **Solving the problem of stacking goods: mathematical model, heuristics and a case study in container stacking in ports**. *IEEE Access*, 9(9), 25330-25343. doi:10.1109/ACCESS.2021.3052945
- Lersteau, C., Rossi, A., & Sevaux, M. (2018, mar). **Minimum energy target tracking with coverage guarantee in wireless sensor networks**. *European Journal of Operational Research*, 265(3), 882-894. URL: <https://doi.org/10.1016%2Fj.ejor.2017.08.045>
- Lersteau, C., Rossi, A., & Sevaux, M. (2016, jul). **Robust scheduling of wireless sensor networks for target tracking under uncertainty**. *European Journal of Operational Research*, 252(2), 407-417. URL: <https://doi.org/10.1016%2Fj.ejor.2016.01.018>

CONTACT

✉ charly.lersteau@gmx.com

🌐 <https://charly-lersteau.com>

☎ +33 6 25 02 47 37

SKILLS

Optimization Advanced ●●●●●

- Mathematical modeling
- Combinatorial optimization
- Multi-objective optimization
- Linear programming
- Column Generation
- Branch-and-Price
- Metaheuristics
- Complexity theory
- Graph theory

Programming Advanced ●●●●●

- C, C++, Rust
- PHP
- TypeScript, JavaScript
- Python
- SQL
- CPLEX, SCIP, Gurobi

Writing Advanced ●●●●●

- LaTeX, Beamer
- Literature review
- Technical writing

Data science Elementary ●●○○○

- Data parsing and analysis
- Link different data sources

LANGUAGES

French Native speaker ●●●●●

English Fluent ●●●●○

Italian Elementary ●●○○○

Mandarin HSK1 ●○○○○

INTERESTS

- Traveling
- Philosophy
- Salsa dance
- Kung fu (Hung gar)
- Science-fiction, Steampunk