Charly Lersteau

Developer and Researcher in Operations Research

EXPERIENCE

Project Manager and PHP 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 and C++ Developer (2 years)

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

- Algorithms for crane scheduling and stacking problems
- Directed by Weiming Shen

Research Fellow and C++/Python Developer (2 years 1/2)

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

Master thesis (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

PROJECTS

Vitrine (Rust)

Static site generator Rust

- Create websites from Markdown, SCSS, TypeScript files
- Source code : <u>https://github.com/charlyisidore/vitrine</u>

PSLP solver (C++)

Optimize storage of containers in ports C++

- "Branch-and-Price" algorithm using SCIP
- Mixed integer programming model using CPLEX
- Source code : <u>https://github.com/charlyisidore/pslp-st-conflicts</u>

NideMall (JavaScript)

E-commerce platform JavaScript - Node - Vue

- Customizable online store
- Backend in Node.js
- Admin frontend in Vue.js
- Mobile app and WeChat mini program
- Port of litemall (initially in Java)
- Source code : https://github.com/charlyisidore/nidemall

Vocab' (TypeScript)

Lingo game TypeScript - SolidJS

- Web app organized in components (like React)
- Source code : <u>https://github.com/charlyisidore/vocab</u>

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

CONTACT

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- https://github.com/charlyisidore
 - https://gitlab.com/charlyisidore

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SKILLS

Programming Advanced

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

Optimization Advanced

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

Writing

- LaTeX, Beamer
- Literature review
- Technical writing

Data science Elementary ●●○○○

Advanced

- Data parsing and analysis
- Link different data sources

LANGUAGES

French	Native speaker	•••••
English	Fluent	••••
Italian	Elementary	●●000
Mandarin	HSK1	00000

INTERESTS

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