Nicolas Corvol

Future CIFRE PhD student in Operations Research, in collaboration between Renault Group and the CERMICS.

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Education

Conservatoire National des Arts et Métiers Sep. 2024 – Oct. 2025
Master Parisien de Recherche Opérationnelle (MPRO) *Paris, France*
- Coursework: Stochastic Optimization, Mathematical Programming, Deep Learning for Combinatorial Optimization, Decomposition Methods, Metaheuristics, Constraints Programming, Scheduling, Graph Theory.

Ecole Nationale des Ponts et Chaussées Sept. 2021 – Dec. 2025
Master's degree in mathematics and computer Science specialized in Optimization. *Paris, France*
- Coursework : Operations Research, Convex Optimization, Stochastic Processes, Software Development, Game Theory, Machine Learning, Data Science for Business.

CPGE Lycée Charlemagne (MPSI/MP*) Sept. 2019 – Jun. 2021
Two-year intensive preparatory program in Mathematics and Physics. *Paris, France*

Lycée Sevigné Sept. 2011 – Jul. 2019
Scientific baccalaureate with european section, highest distinction. *Paris, France*

Work Experience

Renault Group - CERMICS Apr 2025 – Oct. 2025
End-of-study Internship (Supervisor: Axel Parmentier) *Paris, France*
- Formulated the car dealer stock replenishment problem as a Markov decision process.
- Designed and implemented a combinatorial optimization–augmented ML policy.

Padam Mobility Feb 2024 – Aug. 2024
Operations Research Intern *Paris, France*
- Built a multi-criteria decision algorithm and MILP in Cython for parking and bus stop optimization; deployed in production and presented at ROADEF 2025.

Polytechnique Montréal (CIRRELT) Jul. 2023 – Dec. 2023
Research Assistant (Supervisor: Thibaut Vidal) *Montréal, Canada*
- Conducted research on machine learning and optimization using PyTorch.
- Developed an end-to-end prediction–optimization pipeline combining NLP, neural networks, and portfolio optimization.

Academic Project

Air Liquide | Robust Optimization Jan. 2023 – Jun. 2023
- Developed robust optimization models for managing uncertainty in renewable energy and hydrogen production.

Smart Seating Plans for weddings Jan. 2022 – Jan. 2023
- Built a web application using MILP to optimize wedding seating arrangements, maximizing guests' satisfaction.

Leadership & Volonteering

ENPC Teaching and Research Council | *Member* Jan. 2022 – Dec. 2024
- Represented student interests in weekly meetings with school administration.

Student Council of Ecole Nationale des Ponts et Chaussées | *President* Jan. 2022 – Jan. 2023
- Managed an €200,000 budget, leading a team of 18 to organize events for 400+ attendees.

Skills, Languages & Interests

Programming Languages: Python, C++, Julia, SQL, R
Tools: GitHub, LaTeX, SCIP, Gurobi, PyTorch, NumPy, Django
Languages: French (Native), English (Fluent, TOEIC 885/990), Spanish (Intermediate, B1)
Hobbies: Cycling (climbed Mont Ventoux) - Rugby (Ponts' school team) – Tennis (Competitive level) – Running