

Maxime NICAISE

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Education

MSc in Mathematical Engineering - CentraleSupélec, Université Paris-Saclay *Sep. 2023 – Apr. 2027*
4 years

CentraleSupélec, Paris, France

- French Grande École, admitted after national competitive examination - GPA 4.1/4.33.
- Machine Learning, Optimization, Measure Theory, Probability, Statistics, Functional Analysis, Partial Differential Equations, Control Theory, Signal Processing, Algorithmics.

Preparatory Classes to Grandes Écoles - Lycée international de Valbonne *Sep. 2021 – Jul. 2023*
2 years

Lycée International de Valbonne, Valbonne, France

- Intensive undergraduate training program in mathematics, computer science, and physics for the national competitive entrance exams to French engineering grandes écoles - GPA 4.0/4.0.

Experience

Machine Learning Internship *Feb. 2026 – Aug. 2026*
6 months

Hypertrade, Bangkok, Thailand

- Investigating retail sales forecasting through preprocessing, design and evaluation of predictive features, and empirical comparison of statistical and machine learning models on real-world client data.
- Preparing work on an LLM-based analytics agent integrating database queries and existing machine learning functionalities to support client access to business data and model outputs.

Research Internship in Mathematics *Sep. 2025 – Feb. 2026*
6 months

INRIA, Sophia-Antipolis, France

- Established theoretical equivalence between f -divergence-regularization schemes for Optimal Transport. Results submitted to the 2026 IEEE ISIT Conference (Research report: hal-05454647 [🔗](#)).
- Designed and implemented a stabilized Sinkhorn-type algorithm for semi-relaxed regularized optimal transport. Established convergence guarantees. Research report in preparation for conference submission (planned Q3 2026).
- Served as a reviewer for IEEE ISIT 2026 conference via EDAS.

Oral Examiner (“Colleur”) for Second Year of Preparatory Classes *Sep. 2025 – Feb. 2026*
6 months

Lycée International de Valbonne, Valbonne, France

- Mathematics oral examiner for second-year classes préparatoires, conducting weekly oral examinations, guiding students through exercises, and providing feedback on problem-solving and mathematical reasoning.

Three-semester PDE Research Project *Jan. 2024 – Jun. 2025*
18 months

CentraleSupélec, Paris, France

- Studied topics in functional analysis and partial differential equations, focusing on the extension of classical results to domains with weaker regularity assumptions.

Mathematics teaching assistant *Sep. 2024 – Feb. 2026*
7 months

CentraleSupélec, Paris, France

- Designing and conducting weekly 2-hour tutorials in Probability and Statistics for third-year undergraduate students at CentraleSupélec. Selected for this role based on excellent undergraduate mathematics grades.

Volunteering

President of the boxing and kickboxing association *Sep. 2024 – Jun. 2026*
10 months

CentraleSupélec, Paris, France

- Coordinated inter-school competitions with French Grandes Écoles and led recruitment of team members.
- Secured multiple Inter-University titles, including 2025 Regional Champion and 2024 Vice-Champion.

Skills

Programming : Python, OCaml, R, C, L^AT_EX, MATLAB, SQL.

Languages : French (native), English (proficient), Spanish (intermediate), Thai (Conversational).