

Yann Pernot



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pernot-yann



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PROFILE

I'm a Research Assistant at Mila working on Genomic Foundation Models pretraining and their application to Antimicrobial Resistance prediction. In parallel, I'm a full-time Master's student at Centrale Lyon and Polytechnique Montréal. Previously, I spent a year as an R&D Engineer with a Tokyo-based AI startup.

EDUCATION

Polytechnique Montréal

MEng, Computer Science - specializing in Reinforcement Learning & ML

Sep 2025 – Feb 2027

Montréal, Canada

Centrale Lyon

MSc / Diplôme d'Ingénieur, Applied Mathematics & CS - French Grande École

Sep 2022 – 2027

Lyon, France

Prépa ECAM

Intensive Mathematics & Physics (CPGE) - Rank 1st/120

2020 – 2022

Lyon, France

EXPERIENCE

Mila - Quebec AI Institute

Research Assistant - supervised by Prof. Sarath Chandar

Feb 2026 – Present

Montréal, Canada

Genomic Foundation Models pretraining; collaboration with bioMérieux.

Corpy & Co

AI R&D Engineer, Full-time Contract

Feb 2025 – Jan 2026

Tokyo, Japan & Remote

Delivered 10+ custom ML systems (CV, OCR, VLM/LLM, diffusion) for industrial clients, taking each from research to production; led several €30k+ contracts, all renewed.

Ubisoft

Data Scientist Intern

Apr – Oct 2024

Paris, France

Built predictive ML models shipped into Ubisoft's worldwide **Production Intelligence** platform.

Lycée Aux Lazaristes-Lasalle

Engineering Science HS Teacher, Contract

Oct 2023 – Apr 2024

Lyon, France

Designed and taught an Engineering Sciences curriculum (Math, Physics, Logic, CS) for a class of 25.

PUBLICATIONS

Y. Pernot, V. Retault. "Drowning in Routine: Signal Dilution in Multi-Turn Agent Training." *FAGEN Workshop, ICML 2026*. [arXiv:2606.22164](https://arxiv.org/abs/2606.22164).

SELECTED PROJECTS

NTv3 Genomic FM Pretraining

2026

Distributed Training - Mila

Built a multi-node (8-GPU) training pipeline from scratch on raw `torch.distributed` primitives, reaching **2×** token throughput over InstaDeep's published NTv3 figures at matched benchmark performance.

Sub-millimeter Defect Detection

2025

Surface Reconstruction & DL - Yamaha R&D (Corpy & Co)

Built a photometric-stereo + Mask R-CNN pipeline detecting sub-millimeter defects invisible under standard lighting, outperforming the client's prior approach (validated by significance testing).

TEACHING & OUTREACH

Chandar Lab Summer Camp, Instructor - Mila

Jul 2026

Bureau des Étudiants (BDE), General Secretary - Centrale Lyon

2023 – 2024

Genius Program, Volunteer Teacher

2022 – 2023