

EXPERIENCE

AI Annotator | DataAnnotation

Freelance, Sept. 2026 – Present

- Solving data science and engineering problems to train large artificial intelligence models.

Data Scientist – Research Partner | Commissionnaires du Québec

Montreal, Sept. 2024 – Sept. 2026

- Designed and delivered an **end-to-end AI-driven tool** covering the entire bid response process; presented it several times to the executive committee and to all staff.
- Developed a pricing model (XGBoost / Learning-to-Rank) combining market dynamics with the technical characteristics of each contract: simulated win rate of **40% vs. 15%** for the existing pricing rule, **+10% profit** compared with historical results in retrospective backtests.
- Built the **data pipelines** from scratch (internal Excel and PDF files, external APIs and web scraping) and the cross-referenced database; information extraction from contract documents using **NLP** and **hierarchical RAG**; feature selection and engineering.
- Delivered the decision-support application (Streamlit) and deployed the infrastructure on **Azure**: ADLS Gen2 data lake, Functions, App Service, containerization. Built automated Excel workbooks with VBA macros for reporting outside the tool.

Vice-President of the School's Computing and History Student Associations | ENSAM

France, 2023-2024

- Designed and programmed an ESP32 device for real-time sales recording at a **3,000-attendee** event: MQTT transmission, centralized inventory and **demand forecasting** to anticipate restocking between points of sale.
- Built an annotated virtual tour website; awarded a **€1,000 FSDIE grant**.

Operations Engineering Intern | Blanc-Breizh

France, Summer 2023

- Industrial laundry (300 clients, 180 t/week): operations research problems, scheduling, optimization, delivery routing

EDUCATION

Research Master's (M.A.Sc.), Department of Mathematics and Industrial Engineering | Polytechnique Montréal

Montreal, 2024-2026

Thesis: *Bid response process: integrating artificial intelligence methods that leverage contractual and competitive data.*

Member of: Jarislowsky/AtkinsRéalis Research Chair and CIRRELT (Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation)

Results: **GPA 4.0/4.0 – Excellence Distinction** – scientific publication (CENTERIS 2026)

Master of Engineering, Grande École Programme | Arts et Métiers ParisTech (ENSAM)

France, 2022-2026

Results: **Top 10%** – Recipient of an international mobility scholarship from the alumni association

Preparatory Classes for the Grandes Écoles (CPGE), PTSI/PT* | Lycée Livet

France, 2020-2022

SELECTED PROJECTS

From Neuron to Artificial General Intelligence (AGI) ([GitHub](#))

2026

- Notebooks that rebuild each core component from scratch before using the reference library, then verify that the implementations match it: autograd, Transformer and GPT, BPE tokenizer, LoRA and DPO fine-tuning. RAG, coding agent and MCP server. (Python, PyTorch, Transformers, *RAG, LoRA, evaluation*)

LLM Strategy Agent for a Territory-Control Strategy Game ([GitHub](#))

2026

- Developed an AI agent powered by a local LLM to play OpenFront against the game's built-in AIs. The agent combines strategic planning, a graph-based representation of the game state and rule-based knowledge retrieval. Implemented a strategist-commander architecture. (*TypeScript, agentic AI, RAG, graphs, LM Studio, testing and evaluation*)

Claude/GPT MCP Connector for SEAO Public Procurement ([GitHub](#))

2026

- Local MCP server enabling an LLM to query Quebec's open public procurement data (SEAO) in natural language: ingestion pipeline for raw notices, cleaning and normalization in SQLite, hybrid query engine; enables competitive analysis powered by an LLM's reasoning capabilities. (*Python, SQL, LLM, MCP*)

Constitutive Behavior Analysis of a Superalloy | Safran Aircraft Engines – semester project

2024

- Instrumented a forging process, then identified the constitutive law from the collected data using machine learning; validated through numerical simulations. (*Python, Machine Learning, Simulations*)

Rocket Nose Cone Manufactured by Filament Winding | CNES (Perseus) – semester project

2024

- Computed the filament deposition paths as geodesics, programmed the 4-axis winding machine (G-code) and developed an interface to compile, check and visualize the paths. (*Python, Mathematics*)

SKILLS

General: Complex problem solving, rigor, autonomy, communication, teamwork

Programming: Python, SQL, VBA

Data Science: Machine learning, NLP, RAG, LLMs, AI agents, time series, statistics

Data & Cloud: Azure (ADLS Gen2, Functions, App Service, containers), Docker, Git, Streamlit

Languages: French (native), English (C1 – TOEIC 950)

Certifications: [IBM Data Science Specialization](#) (Coursera), [Stanford Machine Learning Specialization](#) (Coursera)