Aurélie Gallet

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Education

Master of Science Computer Science   *2025 – present*
McGill University, Canada – **GPA: 4.0/4.0**
Relevant Coursework: Natural Language Understanding with Deep Learning, Applied Machine Learning

Bachelor of Science Artificial Intelligence   *2022 – 2025*
University of Groningen, Netherlands – **Graduated Summa Cum Laude**
Relevant Coursework: Machine Learning For Industry, Neural Networks, Reinforcement Learning

Research Experience

Expert Elicitation and Sycophancy in Large Language Models (LLMs)   *Oct 2025 – Dec 2025*
Graduate Research project, McGill University
- Evaluated the impact of expert persona elicitation on LLM robustness to misleading feedback using few-shot prompting within a multi-turn forecasting pipeline implemented via the OpenRouter API
- Quantified sycophancy-related robustness using Brier scores and an LLM-as-judge framework for reasoning consistency, finding that domain-aligned expert prompting improved robustness in 7 out of 9 models

Impact of Contrastive Learning on Explanation Quality   *Feb 2025 – Jul 2025*
Bachelor's Thesis, University of Groningen
- Compared Supervised Contrastive Learning versus Cross-Entropy loss on Grad-CAM explanation quality using PyTorch and scikit-learn on skin cancer classification images (HAM10000 dataset)
- Performed statistical tests and found a statistically significant improvement in explanation faithfulness (median IROF: 70.39 vs 51.36)

Projects

Pollution Forecasting System   *Sep 2024 – Nov 2024*
- Trained LSTM ensemble model for 3-day NO_2/O_3 pollution forecasting using environmental data from multiple governmental organizations with feature engineering for temporal and seasonal patterns
- Deployed proof-of-concept model on Hugging Face with automated daily predictions, REST API for real-time inference, and administrative dashboard for monitoring
- Built validation and monitoring for the deployment pipeline (missing data checks, KS-test drift detection, out-of-range warnings) and defined MAPE-triggered retraining criteria

Office Equipment Inventory System   *Feb 2024 – Jun 2024*
- Co-developed a full-stack web application for client Gomibo/Belsimpel to replace their manual Excel-based inventory tracking system
- Implemented the employee search/detail (equipment, teams) views in React (HTML/CSS/JS) and integrated them with the Laravel/MySQL backend, deployed via Docker

Skills

- **Programming:** Python, Java, C, SQL, R, LaTeX, Git
- **ML & Data:** PyTorch, scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, TensorBoard
- **Deployment:** Docker, Hugging Face, FastAPI/Flask, HPC/GPU clusters
- **LLM & Prompting:** Hugging Face Transformers, OpenRouter API, Prompt Engineering, Few-Shot Learning
- **Languages:** English (native), French (native)