Margot Berton

Data Scientist

Montreal, Canada

LinkedIn — Portfolio website

Profile

Data Scientist with a strong background in applied machine learning and data-driven problem solving. Experienced in exploratory data analysis, model development, and translating business questions into actionable insights in international and cross-functional environments.

Experience

Data Scientist *Since Nov 2024*

BNP Paribas — New York, USA (Nov 2024 – Nov 2025) / Montreal, Canada (since Nov 2025)

- Designed and delivered end-to-end RAG pipelines for data extraction from business documents, achieving 80% accuracy against an initial 70% target and supporting business decision-making.
- Conducted exploratory data analysis and experimentation on LLM approaches, including prompt engineering strategies and agentic AI patterns (e.g. agentic retrievers).
- Partnered with non-technical stakeholders to prioritize use cases, interpret results, and deliver actionable insights through clear communication and data-driven narratives.

Computer Vision Intern *Feb 2024 – Aug 2024*

MBDA — Le Plessis-Robinson, France

- Performed analysis and evaluation of existing computer vision models using explainability methods and uncertainty quantification.
- Contributed to improving model robustness and reliability in a defense-industry context.

Software Development Intern *Jun 2022 – Aug 2022*

AiiNTENSE — Evry, France

- Developed a Python-based graphical interface for a medical pupillometer used in neurology and intensive care.
- Applied best practices in data handling and software reliability in a healthcare context.

Education

Academic Exchange – AI Specialization *Aug 2023 – Dec 2023*
Polytechnique Montréal — Montreal, Canada
Master of Computer Science *2021 – 2024*
Télécom SudParis — Evry, France (Institut Polytechnique de Paris)
Preparatory Class for the Grandes Écoles *2019 – 2021*
La Martinière Monplaisir — Lyon, France

Skills

- **Programming:** Python, SQL, Java
- **Machine Learning & AI:** Pandas, NumPy, Scikit-Learn, PyTorch, OpenCV
- **Generative AI:** LLMs, Prompt Engineering, Retrieval-Augmented Generation (RAG), HuggingFace, LangChain
- **Data Analysis & Visualization:** Exploratory Data Analysis, Matplotlib, Seaborn
- **Tools & Platforms:** Git, Jupyter Notebook, GCP, Docker
- **Languages:** French (native), English (C1 — TOEIC 980/990)