# Guillaume Kunsch

Machine Learning Engineer (Linkedin, GitHub, Website) kunschguillaume@gmail.com

#### PRINCIPAL INTERESTS

Software engineering, Machine learning, Deep learning theory, Language models

#### **EDUCATION**

## ENS Ulm, Mines Paris, Université Paris Dauphine - PSL University

Master 2 IASD, Artificial Intelligence

- Related courses: Optimisation, NLP, Sequence model, Deep Reinforcement Learning, Databases, Game Theory. Graduated with Distinction (ranked 3/47).
- Master thesis: Medical code classification based on free-text clinical notes. Advised by Dr. Alexander Belikov.

## CENTRALE PARIS - Paris-Saclay University

Master "Grande Ecole" curriculum

- Related courses: Maths, Physics, Software Development, Machine Learning.
- Exchange with ETSII-Universidad Politecnica de Madrid in Operational Research.
- Master thesis: Quantitative study on the relationship between cryptocurrencies and social media flows. Advised by Pr. José Manuel Mira-McWilliams.

## COLLEGE STANISLAS

Preparatory Class PCSI-PC

- Post-secondary intense preparation in Mathematics, Physics and Chemistry for the highly competitive national entrance exams to the top French engineering schools.
- Project: Measurement and monitoring of antifouling concentration in salt water for the prevention of marine biodiversity.

#### EXPERIENCE

# Research Engineer, Technology Innovation Institute

April 2024 - present

• LLM pre-training (data mixtures, distributed computing, evaluation)

## Machine Learning Engineer, Qantev

September 2022 - April 2024

- Data exploration & cleaning on large datasets. Understand and prototype ideas from research papers. Version controlling, reproducibility, and deploying machine learning models (Git, Docker, CI/CD, Azure, Kubeflow, Django, Dagster).
- Implemented the 1st in-house medical classification model (RoBERTa) enhancing SOTA models (f1 macro from 15.1% to 21.9%) leveraging Hugging Face and Pytorch.
- Implemented from scratch in Pytorch a constrastive embedding model leveraging non-Euclidean geometry and trained it

## Venture Capital Deep Tech Analyst, Elaia

January 2021 - September 2022

- Conducted early-stage investment in multi-sectorial deep-tech areas, mainly Artificial Intelligence, Cloud Computing & Healthcare. Helped conclude 10+ investments: in-depth analysis of technology.
- Participated in the development of a quantitative portfolio management tool based on Monte-Carlo method.

# Product and Data Analyst, FoxIntelligence

June 2020 - September 2020

- Worked in a data-driven environment ensuring data quality and analytics on Google Cloud Platform (10k users, 100+ clients).
- Developed 5+ monitoring tools (Tableau, Python, SQL) for data workflow.

## **OTHERS**

- Languages: English (fluent), Spanish (conversational), French (native).
- Interests: Running, Judo, Cinema.
- Skills: Python (Pandas, Numpy, Scikit-learn, Pytorch, Networkx, Hugging Face), SQL.