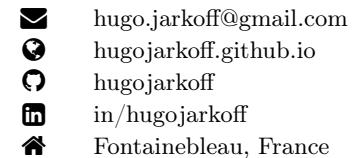


Hugo JARKOFF

Machine Learning Software Engineer (MSc.)



ML Software Engineer with 5+ years of experience building and deploying ML systems at scale.

EXPERIENCE

- Addactis (formerly NamR, acquired in 2025)** Paris, France
ML/CV Software Engineer 2024 - present
Ownership of production ML systems for aerial imagery and SaaS products:
 - Refactored the team's ML training framework, reducing time from data acquisition to production release by over 50%.
 - Redesigned the team's aerial imagery processing pipelines with serverless Cloud Run APIs, cutting legacy codebase size down and reducing data integration time for ML workflows.
 - Optimized the team's ML inference framework with PyTriton on serverless GPUs, reducing inference costs by enabling autoscaling to zero.
 - Designed, built, and deployed an AI agent platform (FastAPI + Pydantic-AI) integrated into production SaaS insurance products.
- Finegrain** Paris, France
ML/CV Software Engineer 2024 (4 months)
State-of-the-art generative model finetuning for image editing:
 - Fine-tuned foundation models (SAM, Stable Diffusion) using adapters (LoRA, IP-Adapter) for image editing tasks.
 - Conducted continuous literature review in generative modeling.
 - Contributed to the team's high-performance OSS micro-framework for foundation model adaptation (Refiners).
- Invoxia** Paris, France
R&D Machine Learning Engineer 2021 – 2024
Led multiple end-to-end ML projects from research to deployment:
 - Designed a CV-based signal processing model to estimate canine respiratory rate from accelerometer data; achieved 98.5% accuracy (preprint available).
 - Researched and adapted neural architectures (CNNs, Vision Transformers), focusing on model compression for embedded deployment.
 - Deployed ML models to 10k+ production devices via Kubernetes and AWS SageMaker, with real-time monitoring (Grafana, Prometheus).
- Sopra Steria (for NavBlue - Airbus)** Toulouse, France
End-of-Studies Team Project 2019 – 2020
– Developed an airport image segmentation and classification system using fully convolutional neural networks (UNet).

EDUCATION

- ISAE-SUPAERO** Toulouse, France
Engineering Degree (MSc.) 2016 – 2020
 - *Major in Machine Learning:* Deep Learning (Computer Vision, NLP), RL, MLOps.
 - *Minor in Advanced Mathematics:* Bayesian statistics, HPC, optimization.
- Lycée Louis-le-Grand** Paris, France
Preparatory Classes 2014 – 2016
 - *PCSI - PC**: Mathematics - Physics - Chemistry - Computer Science.

TECHNICAL SKILLS

- Programming:** Python (advanced, async APIs, design patterns), Bash; working knowledge of C, Java.
- Deep Learning:** PyTorch, TensorFlow, Keras.
- MLOps & Infrastructure:** Docker, Kubernetes, Terraform, NVIDIA Triton, CI/CD (GitLab), experiment tracking (WandB, ClearML).
- Databases:** PostgreSQL, PostGIS.
- Cloud Platforms:** Google Cloud Platform (GCP), Amazon Web Services (AWS).

LANGUAGES

- French:** Native language.
- English:** Full professional proficiency.
TOEFL ITP: 633/677.

PERSONAL PROJECTS AND DIVERSE INTERESTS

- Language Models Training:** RapGPT: Trained a Transformer-based language model from scratch (architecture, training loop, and deployment) to generate French rap lyrics; deployed live demos on Hugging Face (with open weights).
- Rock Climbing / Mountaineering:** Experienced climber and mountaineer (over 20 years of practice). Designed and built a custom finger-force measurement device (ESP32 soldered with deformation gauge, embedded with C software).