Sinoué GAD

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GitHub | LinkedIn | Website | Hugging Face

WORK EXPERIENCE

Ampere - AI research intern   Spring 2025 - 6 months
– Conducted research to develop a real-time model for high-level semantic understanding of road scenes, leveraging state-of-the-art visual reasoning architectures and reinforcement learning.

X&Immersion - ML research intern   Spring 2024 - 3 months
– Developed and implemented an optimized AI model focused on emotional intelligence generation, using NLP and LLMs.
– Integrated the model into a real-time game engine (Unreal Engine), optimizing performance for in-game use

PROJECTS

Luth - KuraKura   GitHub — Hugging Face
– Built and fine-tuned French LLMs (0.6B & 1.7B) with curated datasets and model merging, achieving SoTA French results with strong cross-lingual retention.

Muon Clip   GitHub
– Developed an implementation of the Muon optimizer featuring the latest research advancements: QK-clipping, improved Newton–Schulz gradients orthogonalization, ZeRO 1 like distributed training ...

VLM GRPO   GitHub
– Implemented GRPO training for VLMs, missing from existing frameworks.
– Integrated with TRL and Unsloth for seamless use and for multiple VLMs (Qwen, Gemma, LLaMA...).

EDUCATION

Ecole Polytechnique   2025 - present
MSc Data Science

Politecnico di Milano   2024 - 2025
M2 Track Computer Science / AI - Academic Exchange
Relevant coursework: *Data mining,Foundations of AI, Deep learning, Uncertainty in AI, Computer vision.*

Télécom SudParis   2022 - 2025
Master of Engineering - Computer Science and AI
Relevant coursework: *Machine learning and deep learning, data analysis, applied statistics and probabilities, optimization algorithms, computer vision, data mining.*

SKILLS & INTERESTS

Programming Languages	Python, C, Bash, Java, Git
Frameworks	Pytorch, Transformers, Triton, Unsloth, TRL, Peft, vLLM, Numpy, Pandas
Language	**French**: native speaker, **English**: full professional proficiency (C1), **Arabic**: simple interactions (A2)
Extracurricular	**Rower** (ex french champion), **3D Artist**, **Guitar player**