

Gaétan Forestier

Applied AI Engineer | LLMs & Agentic Development

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Sydney, NSW · Working Holiday visa (subclass 417)

PROFESSIONAL SUMMARY

Applied AI engineer who developed, tested and integrated a Python regression model into Safran Helicopter Engines' industrial pipeline. The model is used in production every day, on hundreds of helicopters. Personal work covers open-weight LLM inference, tool-use evaluation and agent integration with vLLM, SGLang and Docker. More than a year on the customer side of a multi-million-euro NLP project at the French Defence Procurement Agency, writing what the contractor had to build and testing what it delivered.

I build my personal projects under the name Taelyos.

CORE SKILLS	Programming & ML	Python, object-oriented programming, supervised ML, unit testing, Git/GitLab; computer vision and point-cloud prototyping.
	LLMs & agents (personal practice)	Open-weight LLM inference and evaluation, vLLM, SGLang; Hermes Agent, Codex, Claude Code, MCP-connected tools.
	AI project delivery	Requirements, technical specifications, acceptance criteria and testing, supplier technical negotiations, technical reporting.
	Systems (personal practice)	Practical Docker Compose use, Linux/SSH, self-hosted services and monitoring.

- PROFESSIONAL EXPERIENCE**
- DGA | AI Technical Project Engineer**
French Defence Procurement Agency · France · April 2025 – July 2026
- On the customer side, the single technical point of contact for more than a year on a multi-million-euro NLP project extracting events from text with named entity recognition, built by a contractor for about ten core users and, in time, a few hundred more.
 - Wrote the requirements, the acceptance tests and the full technical specification for the next phases of the contract under French public procurement rules; replayed the tests with the users at each demonstration and tested the system hands-on during final acceptance.
 - Ran the workshops and led part of the technical negotiations with the contractor; often called in as the AI specialist in meetings between senior decision-makers and technical teams.
- Safran Helicopter Engines | Data Scientist, Health Monitoring (Intern)**
Tarnos, France · April – September 2024 · six-month internship
- Developed a Python regression model for Arriel 2E and 2D helicopter engines, estimating fuel flow from physical engine parameters.
 - Integrated the model into Safran's industrial Python pipeline, wrote unit tests and deployed the changes through the existing GitLab CI/CD pre-production and production workflow.
 - The model is used in production every day for Arriel 2E/2D health monitoring, on hundreds of helicopters, enabling fuel-flow-based analysis where direct measurements are unavailable.
 - Conceived and developed a reference-normalised fuel-consumption indicator for engine condition monitoring; subsequently extended by the team for diagnostic analysis.

- Built an offline, rule-based diagnostic tool to flag early signs of fuel-system actuator anomalies in recorded engine data.

Sysnav | Computer Vision / R&D Intern

Vernon, France · April – August 2022 · five-month internship

- Developed an object-oriented Python/Tkinter R&D prototype to visualise and clean sparse visual-inertial SLAM point clouds and explore structural feature detection for indoor 2D mapping.

SELECTED PERSONAL PROJECTS

Open-weight LLM inference, evaluation and agent integration

Personal lab · 2026

- Compared quantisation and KV-cache settings on a Lenovo ThinkStation PGX (NVIDIA GB10, the DGX Spark platform), measuring generation speed and aggregate throughput under concurrent workloads. Explored trade-offs between memory use, context length and concurrency.
- Deployed open-weight models with vLLM and SGLang using Docker Compose, and connected self-hosted inference endpoints to agent workflows.
- Configured and ran an existing tool-use benchmark to compare model configurations.

Personal software development and self-hosted services

Personal projects · 2026

- Used Hermes Agent, Codex, Claude Code and MCP-connected tools for personal software development and remote Linux administration over SSH.
- Set up Docker Compose services, remote access and backups; checked service persistence and recovery after restarts.
- Built Grafana dashboards for lab-wide, per-host and service monitoring.

CSIRO Image2Biomass, Kaggle | Silver Medal, 45th of 3,805 teams

- Adapted a colleague-developed notebook for image-based biomass estimation and ran DINOv3 fine-tuning and submission experiments, including staged backbone unfreezing; tracked experiments with MLflow.

EDUCATION

Centrale Nantes 2020–2024

Diplôme d'Ingénieur (Master's-level degree), General Engineering

Universidad Politécnica de Madrid 2022–2023

Exchange studies; machine learning and data science coursework

Université de Bordeaux 2017–2020

Bachelor's Degree in Physics

LANGUAGES

English: professional working proficiency · French: native · Spanish: intermediate