Téo Lohrer

RESEARCH ENGINEER & AI TECH LEAD — PARIS, FRANCE

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Ten years across cryptology, defense AI and research — now building agentic AI systems that turn large corpora into sourced analysis.

EXPERIENCE

NOW

Rnest.io — La mètis

Tech Lead, Artificial Intelligence

AI innovation for automated analysis of large web-crawled corpora. Designed the agentic RAG system end to end:

Discovery loop — query derivation, hybrid dense/BM25 retrieval, RRF fusion, cross-encoder reranking, LLM document selection.
Inductive analysis & reports — inspired by Grounded Theory: insight extraction, bottom-up grouping into "dynamics", axial-coding plans, citation-grounded drafting.
Analyst workbench — human-in-the-loop web app to steer each step, add charts and maps, export to Word and HTML.
Architecture — polylith, FastAPI, YAML-driven multilingual prompts, fully local LLM.

`agentic rag / grounded theory / chromadb / bm25 / cross-encoder reranking / fastapi / local llm`

2026

SUMMIT — Sorbonne University

Research Engineer, Project Lead

LIP6 + MLAB (Google CS&S) — internet ICMP mapping: 15% fewer probes at higher precision, known-topology test framework (DIOPTRA group).
LIP6, Experimaestro — AI experiment-plan management: strict runtime type-checking, cluster/client communication layer.
Institut du Cerveau — VR for Parkinson's research: experimenter control app, VR/motion-capture/eye-tracking correlation.
CNRS — medical-data compliance: multi-user full-stack app converting iEEG data to the BIDS standard.
Polytech Sorbonne — Python OOP lectures, "Tools for Computing" course lead, "Introduction to Rust" seminar.

`python / rust / unity / c# / fastapi / teaching`

2023

Ministry of the Armed Forces

Tech Lead, Cryptology & Artificial Intelligence

Managed a team of eight engineers; research project planning and critical systems in operational condition. Supervised fifteen internships, coordinated research seminars, oversaw a Perl-to-Python port of tens of thousands of lines.

`project & team management / machine learning / reinforcement learning`

Cryptology & Artificial Intelligence Engineer

Innovative NLP and algorithmic methods for operational applications; high-performance distributed algorithms. Codebase industrialization — from Subversion and VMs to microservices with GitLab, CI/CD, Docker, Kubernetes and monitoring in two years.

`python / c / hpc / nlp`

2017

Thales Alenia Space

Cryptography Engineer

Cryptographic software securing satellite communications; automated testing methodologies in Python; critical C/C++ systems still in production.

`c / c++ / python / cryptography / satellite systems`

2016

EDUCATION

2015

Dual Master's in Mathematics, Computer Science and Cryptology

Université de Paris — Paris 7 Diderot

Research project: Reed-Müller error-correcting codes. Internship: securing biometrics in a chipless ID, at Thales Communications & Security.

2013

Bachelor's in Mathematics and Computer Science

Université de Paris — Paris 7 Diderot

2010

SKILLS

EXPERTISE

Deep learning	RAG, agentic workflows, prompt engineering
Algorithms	finite automata, combinatorics, NLP
Cryptology	key-management infrastructure, cryptanalysis

PROGRAMMING

Languages	Python, Rust, C
Technologies	Docker, git, GitLab, uv, FastAPI, Django, Claude Code, polylith, vim, LaTeX

MANAGEMENT

Project	planning, agile tracking, client relations
Technical	technical-debt management, review process
Team	recruiting, evaluation, conflict resolution

NATURAL LANGUAGES

French	strong writing skills, fluent speaker
English	fluent, written and spoken, international seminars