Reda EL MEKKAOUI

Engineering student in applied mathematics and machine learning

+33 7 84 99 56 68 • reda.el-mekkaoui@imt-atlantique.net • github.com/Redaelm47
• linkedin.com/in/reda-el-mekkaoui

Looking for a 5-month AI / machine learning internship, March to August 2027

EDUCATION

IMT Atlantique, one of France's leading engineering schools 2025 – 2029
Engineering degree (Master's level), applied mathematics and computing *France*

- Core courses: probability, statistics, optimisation, machine learning, data science, linear algebra.

Lycée Montaigne 2023 – 2025
Two-year intensive maths and physics program for engineering school entrance exams *Bordeaux, France*

- Admitted through a selective national exam.

AI PROJECTS

AI research project Sep 2026 – Dec 2026
School research project, in a pair, supervised by a professor *France*

- Studied how to keep a vision model's error margin reliable when real data shifts (conformal prediction).
- Tested a method that picks more diverse examples: 5 datasets, 13,000 experiments in PyTorch.
- Showed, with a protocol fixed before seeing results, that the small gain came from a measurement bias, not the method.

AdistributionSystem, Meta Global AI Developer Hackathon Oct 2026 – Nov 2026
Indie track, built solo in 8 days *Remote*

- Turns a mid-roll ad break into a short motion-design bridge written for each video, with Meta's models (Muse, SAM 3.1).
- Ranked in the top 15 % out of 20,000 participants.
- $0.041 per video on average over 13 live runs, 2 to 4 minutes end to end; the system reviews and fixes its own render.

On-board vision for an autonomous surface drone Sep 2026 – Present
Engineering project for a French government agency, team of 6 *France*

- Designed the vision system of a small autonomous boat that monitors no-fishing zones: ship detection (YOLO), then registration reading.
- Runs on a Raspberry Pi faster than real time (30 s of video analysed in 17 s); demo validated by the supervisor in October 2026.
- Client contact for the team: follow-up, specifications and planning.

Syllia: AI assistant for speech therapists Summer 2026
Personal project, built alone *France*

- Built an app that drafts speech therapists' assessment reports from their notes, with an LLM.
- Health data protected: patient identity masked before anything reaches the AI, certified health-data hosting.
- 8 clinical domains, PDF and Word export; Python, FastAPI, PostgreSQL, AWS Bedrock.

Protecting AI models with a hidden signature 2025 – 2026
School research project, team of 4 *France*

- Reproduced a paper that hides a secret signature in a neural network to prove ownership.
- 256-bit signature recovered with zero errors, with no loss of performance (accuracy above 99 %); still intact after pruning half of the parameters.

PROFESSIONAL EXPERIENCE

Founder and GTM engineer 2026 – Present
Own company, websites for small businesses *France*

- Started and ran the business alone alongside my studies: prospecting, sales calls, development, online payments, launch and maintenance.
- 4 paying clients in one month (August to September 2026); 20 to 30 % of sales calls closed.
- Next.js, React, TypeScript, Stripe; prospecting and recurring work automated with AI agents.

TECHNICAL SKILLS

- **Mathematics:** probability, statistics, optimisation, linear algebra, conformal prediction.
- **Machine learning:** PyTorch, CNN, computer vision (YOLO, DINOv3), LLMs (Anthropic, Gemini, Bedrock, Meta Muse).
- **Development:** Python, TypeScript, SQL (PostgreSQL), FastAPI, Next.js, React, Git, LaTeX.
- **Embedded systems:** Raspberry Pi, embedded cameras, ArduPilot.

LANGUAGES AND INTERESTS

- **Languages:** French (native), English (B2/C1, technical reading and writing).
- **Interests:** competitive mathematics (olympiads, combinatorics, linear algebra), machine learning.