

Federico Pardo García

AI Engineer · Machine Learning and LLMs · PhD in Computer Science and AI

Built and ran a speech and LLM platform end to end during a PhD in AI (2023-2026). Looking for an applied AI role, ideally with LLMs. Available now, ready to relocate.

📍 Murcia, Spain ✉ federico.pardog@gmail.com
🌐 [linkedin.com/in/federico-pardog](https://www.linkedin.com/in/federico-pardog) 🐙 github.com/fedeparg 🌐 fpardo.net

EXPERIENCE

- **Graduate Researcher (ML engineering, MoviSound platform)** May 2023 - May 2026
University of Murcia · Murcia, Spain
 - **Built and ran MoviSound:** a speech and LLM platform for teachers. They upload a class recording and get the transcript, who spoke when, their students' questions and a summary from a self-hosted LLM. Its speech pipeline processed 287 classroom recordings from nine teachers in four faculties (demo: youtu.be/emgGZ3vdSgg).
 - **Served the analysis through a FastAPI REST API:** Whisper and pyannote inference on one GPU behind a Celery queue and a GPU lock; failures alert the admins.
 - **Evaluated prompted LLMs against a fine-tuned model:** a multilingual DeBERTa classifier of teacher interventions (IEEE Access, 2025). Built the labelled set (1,674 interventions, annotator agreement 0.70 to 0.97); fused with speech features and explained with SHAP, the classifier reached macro-F1 0.71 on unseen teachers with raw transcripts.
 - **Shaped the product with its users:** made the reports by hand for two years, then built the app around what the teachers used. Seven of the eight who answered a survey changed how they teach.
- **Cloud Technical Support Specialist (GCP) · Webhelp, Google Cloud project** Aug 2022 - Apr 2023
 - **Supported enterprise clients on Google Cloud:** BigQuery, Vertex AI and GKE (Kubernetes), with SRE teams on production issues.
- **Data Scientist and Machine Learning Engineer · CENTIC (technology centre)** Jun 2021 - Aug 2022
 - **Built a real-time computer vision service:** a TensorFlow CNN that checks each screw's type and placement.
 - **Shipped a text-complexity tool:** classic NLP, built with a partner university and taken to production.

PROJECTS

- **Sextante** Jun 2026 - Present
Next.js, NestJS, TypeScript, PostgreSQL · sextante.fpardo.net · github.com/Fedeparg/sextante
 - **Built and maintain a finance web app:** Spanish tax calculators and a portfolio tracker, self-hosted in Docker, open source, with tests and CI-gated deploys. Directed the build and reviewed the code; Claude Code wrote much of it.
 - **Added an MCP server for AI agents:** OAuth 2.1, read and write scopes per tool; works as a Claude connector.
- **Self-study: language models and agents · github.com/Fedeparg/local-agentic-eval** Jun 2026 - Present
 - **Implemented a transformer language model from scratch (Stanford CS336):** tokenizer, model, optimiser and training loop in Python and PyTorch; trained a small one on TinyStories to a validation loss of 1.36 (course target: 1.45).
 - **Built a tool-using agent and an evaluation harness for it (Go):** a ReAct agent over a local model, scored with deterministic checks and an LLM judge on its reasoning, running cases concurrently.

SKILLS & LANGUAGES

Machine learning & LLMs NLP · Computer Vision · PyTorch · Hugging Face · scikit-learn · pandas · MCP
Programming & tools Python · SQL · TypeScript · Go · Java · C · C++ · Git · Linux
Engineering & cloud FastAPI · Django · Celery · Kafka · PostgreSQL · MongoDB · Redis · Docker · GCP
Languages Spanish (native) · English (C1)

EDUCATION

- **PhD in Computer Science and AI (Summa Cum Laude) · University of Murcia** 2023 - 2026
 - Thesis: *Enriched Feedback of Classroom Dynamics Using AI*. **Five peer-reviewed publications**, three as first author.
- **MSc in Big Data and AI · University of Murcia (GPA: 8.7/10)** 2020 - 2021
- **BSc in Computer Science, Specialisation in AI · University of Murcia** 2016 - 2020