



DIEGO AGUDELO

MACHINE LEARNING ENGINEER

Open to work.

Availability: **Immediate**

Machine learning engineer: I write models from the maths up and build the pipelines that take them from raw data to a public service. Director of the 42AI AI Lab; civil engineer from 2020 to 2023.

French, English, Spanish

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TOOLS & TECHNOLOGIES

Python, SQL, C
PyTorch, scikit-learn, NumPy
MLflow, **FastAPI**, **Docker**
LangChain, Chroma, Ollama
PostgreSQL, Linux, Git

CERTIFICATIONS

Machine Learning · Stanford (2025)

Supervised / Unsupervised / Reinforcement Learning, decision trees and ensemble methods, Deep Learning

CS50x · Introduction to Computer Science · Harvard (2023)

C, Python, SQL, Algorithms, Data Structures, Web Dev

TECHNICAL PROJECTS

🔗 **Weight Your Wage** | [GITHUB](#) | [DEMO](#)

PYTHON, **PYTORCH LIGHTNING**, **MLFLOW**, **FASTAPI**, **DOCKER**

Salary-prediction MLOps pipeline (team of 5, 42AI AI Lab): ETL, label cleaning, training tracked in MLflow, FastAPI service, monitoring. I built the web front end alone.

🔗 **RAG Syntec** | [GITHUB](#)

PYTHON, **LANGCHAIN**, **CHROMA**, **FASTAPI**, **DOCKER**

RAG over the Syntec collective agreement: 172 documents, dense retrieval on Chroma, a calibrated refusal threshold before the LLM call, a 55-question labelled set (ongoing).

🔗 **Multilayer Perceptron** | [GITHUB](#) | [DEMO](#)

PYTHON, **NUMPY**, **DEEP LEARNING**

Neural network written in NumPy behind a Keras-like API: layers, losses, SGD and Adam. 97.4 % validation accuracy (single 80/20 split).

PROFESSIONAL EXPERIENCE

2026–present
→ PARIS

42 Artificial Intelligence

AI LAB DIRECTOR

AI LAB LEADERSHIP, **MLOPS**, **TECHNICAL MENTORING**

Scope the Lab's projects, recruit and mentor participants; first shipped project: Weight Your Wage.

2022–2023
→ LYON

Egis

INFRASTRUCTURE PROJECT ENGINEER

PRELIMINARY STUDIES, **STRUCTURAL DIAGNOSTICS**, **WATERPROOFING**, **TENDERS**

On-site technical inspections and waterproofing support on underground structures.

Preliminary diagnostics for railway rehabilitation and early-stage design of metro stations (Cairo).

Drafted tender documents and evaluated bidders.

EDUCATION

2023-2026
→ PARIS

🔗 42 Paris

Expert in IT Architecture (RNCP level 7), ends 2026
Systems programming in C and C++, then machine-learning projects.

2011-2020
→ FRANCE / COLOMBIE

🔗 Université de Limoges · Universidad Libre

MSc IMRO - Inspection, Maintenance and Repair of Structures (Limoges, 2020)

Master 1 Construction Management (Limoges, 2019)

Civil Engineering degree (Universidad Libre, Colombia, 2016)