Software Development Engineer

Scientific & Industrial Applications

Fidel Rodrigues Monteiro

Software engineer specializing in scientific and industrial software, combining Python, C/C++, embedded systems and artificial intelligence, with a focus on performance and reliability.



Lyon, France
Metropolitan France

Availability
Immediate

+33 6 21 47 09 49

contact@fidelmonteiro.com

fidelmonteiro.com

TECHNICAL SKILLS

Software

Python · C/C++ · FastAPI · Streamlit · SQLite · Next.js · Software architecture · TypeScript · Tkinter · Flask · PyQt · Qt · Flutter

Scientific Software

Experimental data processing · Spectral analysis · Calibration · CMOS simulation · Test automation

Embedded Systems

C/C++ · Embedded Linux · CAN · UART · Hardware/software integration · TPU/ASIC · FPGA · ESP32 · LoRa · Wi-Fi · Arduino · Raspberry Pi

DevOps & Cloud

Docker · Azure · GitHub Actions · CI/CD · Linux · Git · GitHub · Jenkins

AI & MLOps

Python · TensorFlow · MLOps · ML framework integration · Dataset management · LLM · PyTorch

Computer Vision

YOLO · OpenCV · Image classification · MNIST

Projects Rust · Go · Next.js · Supabase · PostgreSQL · Vercel · Cloudflare · LLM · RAG · Qwen · DeepSeek

LANGUAGES

- **PT** Portuguese — Native
- **FR** French — Fluent
- **EN** English — Professional

EDUCATION

2024
Master Expert en informatique et système d'information
EPSI

2022
Bachelor Concepteur Développeur d'Applications / DevOps
EPSI

2020
Master Instrumentation, mesure, métrologie
Aix-Marseille Université

PERSONAL PROJECTS

Banzami	banzami.com
BANZA	banza.network
Doa	doadoa.app

PROFESSIONAL EXPERIENCE

01/2026 – 08/2026 — **AI / MLOps Development Engineer**
Akkodis

- Optimized the OASIS engine and proposed a new architecture (Python, Streamlit, LLMs). Built CI/CD pipelines for the AQUA-IA project and the ADIAB dataset tool.

03/2025 – 12/2025 — **Software Development Engineer**
SuperGrid Institute

- Developed Python software for post-processing high-voltage arc tests (spectral analysis and calibration). Controlled the test bench motor with Arduino, C++ and Python.

10/2022 – 10/2024 — **Embedded Systems Engineer**
Hyperion Seven

- Tethered drone: Python LoRa protocol to replace Wi-Fi, C++ joystick control of the gimbal, CAN/UART and field testing.

10/2019 – 09/2022 — **AI Engineer**
STMicroelectronics

- Designed a TPU/ASIC AI accelerator and its Python interfaces for TensorFlow integration.

04/2019 – 09/2019 — **Software Developer Intern**
STMicroelectronics

- Built Python and C tools to automate simulation runs and validate CMOS circuits.

Online CV
fidelmonteiro.com/en

Skills Portfolio
fidelmonteiro.com/en/competencies