Christophe Marabotto

AI Research Engineer

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Education

2018–2021 **Master of Science (MSc)**, *EPITA, specialized in Data Science and Artificial Intelligence (SCIA)*, Paris, France.
Main subjects: Mathematics, Algorithmics and Data Science.

2016–2018 **Preparatory Classes (PCSI/PSI)**, *Lycée Alphonse Daudet*, Nîmes, France.
Main subjects: Mathematics, Physics and Engineering Sciences.

Experience

2021-Present **IRT Saint Exupéry**, *Sophia Antipolis, France*, **AI Research Engineer**.
RAPTOR: Development and deployment of Deep Learning models for non-cooperative spacecraft rendezvous missions (Pose Estimation).
Confiance.ai (Grand Défi "Securing, certifying and enhancing the reliability of systems based on artificial intelligence"): Determine the optimal implementation of various Deep Learning models on multiple embedded platforms.
Certified First Aid at Work (SST).

2021 **Airbus Defence and Space**, *Sophia Antipolis, France*, **Data Scientist**, End-of-studies Internship (6 months).
Semantic segmentation of high-resolution satellite images using Deep Learning with an Agile team.

2020-2021 **Ipso Santé**, *Paris, France*, End-of-study project.
Unsupervised clustering of medical reports using Topic Modelling techniques with a team of 4.

2019-2020 **Hexaglobe**, *Paris, France*, **Data Scientist**, Internship (5 months).
Anomaly detection using Deep Learning for a streaming service for both marketing analysis and breakdown prediction using Keras, Kafka and Google Cloud Platform.

Personal Projects

2020 **Image classification**, *Deep Learning for Pneumonia Detection using Chest X-Ray Images with Convolutional Neural Networks (CNNs)*.

2020 **Electronics**, *Design and assembly of an FPV Racing Drone using Betaflight Open Source Flight Controller Firmware*.

Languages

French	Native
English	Full professional proficiency
Spanish	Professional working proficiency

Technical skills

Maths	Numerical Optimization, Statistics, Image Processing, Signal Processing
Programming	Python, C++, C, Java, CUDA, Scala, Shell Scripting, LaTeX
Machine Learning	PyTorch, Tensorflow/Keras, Scikit-Learn, Xilinx Vitis AI
Hardware	Xilinx Kria KV260 (MPSoC), F405 MK2 Flight Controller, Arduino, Raspberry Pi
Tools	Pandas, OpenCV, Matplotlib/Plotly, Valgrind, QGis, Docker, gRPC, Tableau, Flask, Git, Office
OS	Linux, Mac OS, Windows
Cloud Computing	Google Cloud Platform, Amazon Web Services, Microsoft Azure

Others

Sports	Martial Arts (Ju-jitsu, Systema and Sanda)
Making	FPV Racing Drone and 3D printing
Art	Ableton, Adobe Lightroom, DaVinci Resolve, Blender