

LOUIS STEFANUTO

Data Scientist at Capgemini Invent - Polytechnique × Mines

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🌐 LouisStefanuto

🌐 louis-stefanuto

📁 Portfolio

📁 AI posts

EXPERIENCE

Data Scientist - Computer Vision expertise

📍 Capgemini Invent, Paris

📅 03/2023 – Present

Permanent Contract: Consulting on Data/AI for clients.

Current project:

- Steered the tech scoping phase of an object tracking use case. In charge of the data & AI segments.
- Implementing the first AI models for the PoC.
- Led customer workshops: roadmap building, feature prioritization.

Former projects:

- Public Sector: Led the industrialization of a narcotics detection project: finetuning, packaging, deployment pipeline (CICD).
- Reinforcement Learning: Taught RL at X-HEC M2 students in English.

End-of-studies Internship:

- Project 1: Deployed a satellite image analysis model. Developed a Python package toolkit for a 10-person team. (PyTorch, Transformers)
- Project 2: Explored explainability methods on multi-modal CV models

Computer Vision research intern

📍 Poly Montréal LM2, Canada

📅 04/2022 – 08/2022

Accelerated fluid mechanics calculations by coupling differential equations and Deep Learning.

- Physics-informed Neural Networks (PiNNs, Tensorflow)
- Dataset design: 3D tracking, image/video processing (OpenCV)

Platoon Leader - French Army

📍 St-Cyr Coëtquidan, RSMA Martinique

📅 09/2019 – 04/2020

Leadership experience in a regiment providing military and professional training to unemployed young adults in Martinique.

- Supervision and coordination of a section of 30 volunteers during my 1st year at Ecole Polytechnique.
- Advanced exercise of leadership and management skills.

EDUCATION

Mines Paris

📍 Mines, Paris

📅 2022-2023

Double degree "Ingénieur civil" as Polytechnique's end-of-program year. Specialization Digital Engineering of Complex Systems. Focused on Machine Learning and its industrial applications.

Ecole Polytechnique

📍 I'X, Palaiseau

📅 2019-2023

Parcours Grandes Ecoles "Cycle Ingénieur polytechnicien" (X19). 3 years on campus then 4th year at Mines Paris for specialization. *Reinforcement Learning, Deep Learning, Machine Learning ...*

Classes Préparatoires

📍 Lycée S^{te} Geneviève, Versailles

📅 2017-2019

A two-year intensive university-level preparation in Maths, Physics and Chemistry to prepare for nationwide competitive exams (PCSI/PC*).

CERTIFICATIONS

🏆 Azure - Certified DP-100
Cloud Azure Data Scientist Associate.

🏆 Coursera - ML Specialization, Advanced Techniques in Tensorflow.

^ Google Cloud - Currently training for the Associate Cloud Engineer certification.

SOME PROJECTS

Posts about AI - 2024

Writing articles on SOTA models for those curious about AI (AlphaFold2, Diffusion). More content on my website.

Regression on temporal graphs - 2023

Three-month Kaggle challenge. Prediction of the origin of neutrinos based on 3D data graphs from a particle detector.
3D GNNs, Torch Geometric

Weakly Supervised Learning - 2023

Prediction of a genetic mutation from histopathological slides. Owkin challenge.
Attention-based Deep Multi-Instance Learning

Cerebral Aneurysm Segmentation - 2022

Team-based segmentation challenge on a highly limited dataset, ~ 100 MRI scans.
Data Augmentation, UNet3D

TECH

Python Shell Git CICD

Tensorflow + Keras PyTorch

Scikit-learn Pandas SQL

MLflow Azure ML pytest API

Poetry Docker Argo Workflows

LANGUAGES

French (Native)

English (Full professional proficiency, TOEFL iBT : 101/120)

German (Intermediate, Goethe B1)

PASSIONS

- Handball: + 12 years in competition
- Running : Marathon, trail running
- Music: Composition, recording.