



GAËTAN SERRÉ

M2 Mathématiques, Vision, Apprentissage – ENS Paris-Saclay

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Gif-Sur-Yvette, France

gaetanserre

gaetanserre.github.io/

SKILLS

Programming

Python

Tensorflow

Pytorch

SB3

RLlib

C++

CUDA

ONNX

OCaml

Java

Office software

LaTeX

Office suite

LANGUAGES

French: **Native**

English: **Fluent (TOEIC 945)**

HOBBIES

Chess: **~1300 Elo**

Taekwondo: **Paris champion and IDF vice-champion in 2016**

Piano: **since 2020**

Escape Game: **since 2018**

ABOUT ME

I am studying in the Artificial Intelligence master of Paris-Saclay. I am passionate about reinforcement learning, game theory, representation learning and computer graphics. I have done many projects, all available on my Github.

EDUCATION

M2 Mathématiques, Vision, Apprentissage (MVA) | ENS Paris-Saclay

Sept. 2022 – August 2023

Gif-Sur-Yvette, France

Master Artificial Intelligence | Université Paris-Saclay

Sept. 2021 – June 2022

Gif-Sur-Yvette, France

Noteworthy courses:

- Applied statistics (Supervisor: Marie-Anne Poursat)
- Mathematics for data science (Supervisor: Marcella Bonazzoli)
- Fundamental principles of machine learning (Supervisor: François Landes)
- Deep learning (Supervisor: Caio Corro)

Double bachelor degree mathematics/computer science | Université Paris-Saclay

Sept. 2018 – June 2021

Gif-Sur-Yvette, France

- With honors

EXPERIENCE

Internship | INRIA & RTE

May – August 2022

Gif-Sur-Yvette, France

Supervisor: Isabelle Guyon

Organization of the new edition of **Learning to Run a Power Network**, a challenge joining reinforcement learning and electrical network in partnership with Réseau de Transport d'Électricité. Creation of a baseline agent merging RL and expert rules to stimulate the participants. I submitted a **paper** to IEEE SSCI as principal author & presented this edition at the IEEE WCCI conference.

Internship | LMF – INRIA

May – June 2021

Gif-Sur-Yvette, France

Supervisors: Jean-Christophe Filliâtre & Andrei Paskevich

The purpose of this internship was to improve **Why3**, a deductive program verification software. This allowed me to become familiar with the world of research in a large computer science laboratory.

CHALLENGES

I have participated in several artificial intelligence challenges:

- [L2RPN WCCI 2022](#)
- [L2RPN NEURIPS 2020 - Adaptability Track](#)
- [Aerial Image Recognition](#)

SOME PROJECTS


L2RPN 2022 PPO Baseline |

 2022

The code of the baseline agent provided in the 2022 edition of Learning to Run a Power Network.

[RL](#) [SB3](#) [Pytorch](#)

GAiA |

 2021

A chess program that uses a complex residual neural network specialized in image recognition.

You can read the report about GAiA [here](#).

[CNN](#) [Game theory](#) [Pytorch](#) [C++](#) [ONNX](#)

AlphaZero (RLlib) |

 2022

An implementation of the AlphaZero algorithm in a fork of the RLlib library.

[RL](#) [Python](#) [Pytorch](#)

VAE |

 2022

An implementation of a Variational Auto Encoder.

[Python](#) [Pytorch](#)