Antonin **Duval**

ENGINEER IN ARTIFICIAL INTELLIGENCE

6 rue Marie-Davy, 75014, Paris, France

🕲 (+33) 631979262 | <u>@ antonin.duval@hotmail.fr</u> | 🖸 AntoninDuval | 🖫 antonin-duval | Q <u>blog</u> | 25 years old



Looking for a position as Research Engineer/Data Scientist starting in February 2021

Education

CentraleSupelec Paris, France

MASTER OF SCIENCE IN ARTIFICIAL INTELLIGENCE

Theoretical Courses: Advanced Deep Learning, Machine Learning, Reinforcement Learning, Foundation of Al

Applied Courses: DL for Medical Imaging, Ensemble Learning, Information Retrieval, Multi-Agent

ISEP (Institut Supérieur d'Electronique de Paris)

MASTER 2 BUSINESS INTELLIGENCE – ENGINEER Big Data, data analysis, programming.

September 2013 - June 2018

September 2019 - Today

Lycée Fénelon Sainte Marie

BACCALAURÉATS, MATHEMATICS AND PHYSICS Mathematics Specialty.

Paris, France

Paris, France

September 2006 - June 2013

Experience

DATA SCIENTIST - CDI

Thales Research and Technology

RESEARCH INTERNSHIP

Palaiseau, France

July 2020 - Today

January 2018 – July 2019

- · Implementation of state-of-the-art algorithms in reinforcement learning from papers using PyTorch
- Research on how to improve Multi Agent Reinforcement Learning methods by using communication with attention networks.
- · Development of a multi-agent environment for drone control.

Ysance Paris, France

· Mission at Allianz France to develop NLP models in Python for real-time classification of emails (AskMail).

- Creation of pipelines with PySpark for the detection of opportunity (AskSales).
- Development of a process for online ML to automatically retrain our NLP models in production.
- Six months mission at Etam group for predictive marketing. Creation of a model in Python that scores how likely is a client to buy a product after receiving a promotion.

Wabel Paris, France

DATA SCIENTIST – STAGE

January 2017 – August 2018

· Data Management, integration of data.

Projects and Certifications

Creation of ML model to predict french's 2016 election based on INSEE database.

MACHINE LEARNING, PYTORCH, TENSORFLOW, SKLEARN – DECEMBER 2019

Development of a ML algorithm to predict the winner in both first and second round of the 2016's election, using socio-economic variables from French cities.

· Multi Agent Reinforcement Learning on Ants.

REINFORCEMENT LEARNING, PYTORCH – APRIL 2020

Creation of an environment with PyGame to model ants that needs to cooperate to bring back food to the anthill. Training of a deep RL algorithm. More information in our article published in Toward Data Science: How we trained ants using reinforcement learning

Training of a CycleGAN for IRM and CT Scan.

COMPUTER VISON, PYTORCH – FEBRUARY 2020

Training of CycleGAN for the final project of our class of Deep Learning for Medical Imaging. Using open-source data of CT scans and IRM, we were able to translate images from one domain to the other while maintaining coherence.

- Certification Amazon Web Services Technical Professional (Digital)
- Dataiku DSS Certification

Languages _____ Skills

French Programmation Python, Java, R

Anglais TOEIC: 955 / 990 TOEFL: 105/120 Deep Learning / Machine Learning PyTorch, TensorFlow, Scikit

Big Data PySpark, GCP, AWS

Integration Docker, Luigi

Hobbies

Associative Experience

President – Student's Office (2016-2017)

Sports Climbing (bouldering), Ski, Surf **Personnel** Movies, Bass, Chess

Spanish B2 - Semester in Argentina

Student Relationship Manager - IsepAlumni (2019 - Today)