ARNAUD GUIBBERT

Data Scientist 🇫🇷 🇬🇧

arnaud.guibbert@hotmail.com | LinkedIn

arnaud.guibbert.gitlab.io | London

ABOUT ME

Efficient and autonomous, I am a Data Scientist with over 2+ years of experience in developing deep learning models and building end to end ML/Data Pipelines. Over the past two years, I have contributed to 4+ projects, three of which have been successfully deployed in production at Swisscom, serving over 15k+ employees.

SKILLS

Languages: Python(PyTorch, Pandas, Scikit-Learn, Hugging Face, FastAPI, NetworkX, Streamlit), SQL, C++.

Technologies: Docker, Kubernetes, Helm, Git/GitLab, AirFlow, MySQL, MongoDB, AWS.

EXPERIENCE

06/2023 – 10/2024 **Data Scientist** — **Swisscom, Switzerland**

- Internal consulting in a team that designs and develops innovative ML and Data-related solutions
- Leading projects through stakeholders management.
- Developed and deployed in production a multimodal deep learning model to route IT tickets to the correct department and predict failure risks. ***Reduced ticket routing time by a factor of 60 and decreased the failure rate. Currently processing over 10,000 tickets weekly.***
- Developed a deep learning time series forecasting model to predict daily fluctuations in banking payments volume. ***Improved forecast accuracy by 60% on average.***
- Developed and deployed an intelligent AI assistant with a RAG bot backend to assist operators in resolving banking incidents. ***Reduced average incident resolution time by a factor of 3.***

09/2022 – 05/2023 **Research Data Scientist** — **Swisscom, Switzerland**

- Internal research consulting team that performs ML research
- Led a research project to compress large knowlegde graphs using geometric deep-learning. ***Compressing large knowledge graphs with a factor of 300.***

07/2021 – 01/2022 **Internship - Optimization and Operations research** — **Procsim, Switzerland**

- External consulting in a team that designs metaheuristic algorithms and simulation models.
- Developed meta-heuristics algorithms to optimize operating room schedules in hospital settings.
- Developed and deployed simulation models and optimization algorithms to streamline a tyre and a food supply chains. ***Increased the production rate by a factor of 4.***

02/2020 – 06/2022 **Teaching assistant at EPFL & CentraleSupélec** — **EPFL & CentraleSupélec**

- Teaching assistant in applied & advanced machine learning classes (around 100 students) at EPFL. Aiding students in understanding ML fundamental concepts and supervising projects.
- Teaching assistant in quantum and statistical physics class at CentraleSupélec. Supervision of around 30 students. Teaching basics of quantum physics and preparing short exams for the students.

EDUCATION

09/2020 - 04/2023 **Data Science - Master's degree at EPFL** — **Lausanne, Switzerland**

Highest GPA (5.78/6) of the Microengineering/Data Science department. Key classes: *Stochastic Processes, Machine Learning, Deep Learning, Model Predictive Control, Computer Vision, Applied Data Analysis, Graph Theory.*

09/2018 - 04/2023 **Bachelor's & Master's degree of Science at CentraleSupélec / Paris-Saclay University** — **Paris, France**

CentraleSupélec/EPFL Double degree, GPA: 4.21/4.33. Key classes: *Statistics - Advanced Probability - Quantum and statistical physics - Fluid mechanics - Automation - Electronic systems - Electromagnetism - Optimization*

09/2016 - 08/2020 **Preparatory class for the 'grandes écoles' at Lycée du Parc** — **Lyon, France**

Intensive training in Mathematics, Physics, Automation & Mechanical engineering.

PROJECTS

02/2022 - 07/2022 **Neural Architecture Search in complex field for audio recognition** — **EPFL, ML Research**

Developed advanced NAS methods with pairwise operations in the complex field to enhance audio recognition performances. ***Laboratory for Information and Inference Systems - Volkan Cevher***

02/2021 - 06/2021 **Automatic design of Finite State Machines** — **EPFL, Optimization Research**

Compare different optimization algorithms to generate a Finite State Machine. Solving computationally expensive black box MINLP with surrogate models. ***Distributed Intelligent Systems and Algorithms - Alcherio Martinoli***