



# Farid Abdalla

Research Assistant in Data Science

- Biel/Bienne, Switzerland
- 20 March 1996 (27 years)
- farid.abdalla.13@gmail.com
- +41 79 236 78 06
- kurokabe.github.io
- farid-abdalla
- Kurokabe
- Swiss

## Skills



**Machine Learning**  
Scikit-Learn, Pandas,  
Numpy, SQL, Ray  
Tune, Optuna



**Deep Learning**  
Tensorflow, Keras,  
PyTorch, Hadoop,  
Spark



**Reinforcement Learning**  
Ray Rllib, Stable  
Baselines, Unity ML-  
Agents



**Software Engineering**  
Git, Docker,  
Kubernetes, AWS,  
Design Patterns



**Languages & Frameworks**

Python, C# (WPF, Unity), C++ (Qt), Java (JEE),  
Android, Web (Django, Flask), LaTeX

## Languages

**French**  
Native

**English**  
C1

**Japanese**  
JLPT N2 (B2-C1)

**German**  
A2

## Hobbies



Fitness



Anime & Manga



Escape Games



Board Games



Video Games



AI Projects

I am a Research Assistant in Data Science offering 2+ years of experience executing successful machine learning projects from start to finish. With expertise in Python and deep learning frameworks such as TensorFlow and PyTorch, as well as Reinforcement Learning with RLLib, I have a strong foundation in the latest technologies.

## Work Experience

HE-Arc

(09/2020 – Present)

Research Assistant in Data Science

Neuchâtel, Switzerland

- Designed, built, evaluated and deployed multiple machine learning projects with different technologies, including deep learning, and reinforcement learning.
- Used Python, Scikit-learn, PyTorch, TensorFlow, and Ray RLLib to develop and implement machine learning algorithms and models.
- Worked with various data sources, such as time series, images, videos and natural language data, to create effective data-driven solutions.
- Cleaned and preprocessed data to ensure accuracy, consistency, and developed robust data pipelines to streamline data processing and analysis.
- Collaborated with cross-functional teams to develop AI solutions and integrate machine learning models into real-world applications.

## Education

Osaka Metropolitan University

(04/2022 – 09/2022)

Master Thesis

Osaka, Japan

Grade: 6.0 / 6.0

Thesis: Developed a model to generate videos conditioned on two frames. A video is generated in a frame-by-frame manner in order to have coherent movement between the given first and last image. The model is trained on a custom anime dataset and create plausible movements close to the ground truth.

HES-SO

(09/2019 – 09/2020)

Master of Science – Data Science

Lausanne, Switzerland

GPA: 5.5 / 6.0

Thesis: Completed the Master Thesis as an international student at Osaka Metropolitan University in Japan

HE-Arc

(09/2016 – 09/2019)

Bachelor of Science – Software Engineering

Neuchâtel, Switzerland

GPA: 5.6 / 6.0

Award: Best GPA

Thesis: Use Reinforcement Learning with Unity ML-Agents in order to simulate and optimize the production of machines inside a workshop. The machines are trained to adapt to the workshop composition and manage to complete orders of variable complexity while continuously reducing the production time.

## Certifications

Deep Reinforcement Learning  
Course

Huggingface

Grade: Excellent

Winter School in Data Analytics  
and Machine Learning

University of Fribourg, Switzerland

GPA: 5.6 / 6.0