

# XAVIER DELFOSSE

## Data Scientist & Life Science Engineer

@ xavier@windyplace.ch    +41 77 464 36 73    Lausanne, Switzerland  
in xavier-delfosse-9a62731ba    delfoxav



## EXPERIENCE

### Independent Contractor: Machine Learning and Data Science Specialist & Lead Data team

#### Tradepedia

- May 2024 – July 2025    Remotely
- Designed and developed a reinforcement learning-based model for stock market analysis and prediction.
  - Deployed MLflow for model tracking and versioning; served models via custom FastAPI endpoints.
  - Mentored junior data scientists and managed team collaboration via GitHub.
  - Assumed project management responsibilities, including backlog and roadmap planning.

### Bioprocess Development Scientist

#### Securecell AG

- Oct 2021 – August 2024    Urdorf, ZH
- Developed and tested automated control strategies for mammalian and microbial cell cultures using real-time process data.
  - Integrated convolutional neural networks and machine learning models into bioprocess pipelines.
  - Authored and executed validation test plans for new bioprocessing products.
  - Led various bioprocess experiments (cell culture and fermentation) and contributed to the Bioprocess 4.0 product roadmap.

### Internship: Scientist in Quality Control

#### Société Suisse des Explosifs

- 2017 – 2018    Gamsen, VS
- Worked daily as a Lab Scientist in a GMP environment.
  - Led the integration of online analysis tools into the quality control lab's workflows.

## THESIS PROJECTS

#### Master Thesis

- "Implementation and usage of an electronic nose for the monitoring of bioprocesses," 2024.

#### Bachelor Thesis

- "Characterization, optimization, and validation of an autosampling unit for microbial fermentation processes," 2021.

## EDUCATION

### M.S. in Applied Computational Life Sciences

#### Zurich University of Applied Sciences

2021 – August 2024    Wädenswil

### B.S. in Life Science Technologies option Biotechnology

#### HES-SO

2018 – 2021    Sion

## HOBBIES

**Sports**  
Bouldering, Biking, Roller Skating and Calisthenics

**Games**  
Competitive and certified judge for Pokémon TCG (2009–2022)

**Others**  
Homebrewer, hobbyist with Arduino and Raspberry, 3D printing

## SKILLS

Python R SQL Matlab PyTorch  
TensorFlow Scikit-learn ML DL  
RL NLP LLMs LangChain Langflow  
MARL MLflow Git  
MODDE LabX Lucillus USP DSP  
PAT HPLC GC fermentation cell culture  
PCR

Team leadership project ownership  
Science Communication analytical thinking

## LANGUAGES

French  
English  
German

