XAVIER DELFOSSE

Data Scientist & Life Science Engineer

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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.

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.

LANGUAGES

French
English
German

EDUCATION

Ph.D. in Life Sciences

HES-SO Valais Wallis / Karlsruhe Institute of Technology

📅 2026 – 2029   📍 Sion

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   Lucullus   USP   DSP
PAT   HPLC   GC   fermentation   cell culture
PCR

Team leadership   project ownership
Science Communication   analytical thinking