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 – Ongoing   ⚲ 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 · Lucullus · USP · DSP · PAT · HPLC · GC · fermentation · cell culture · PCR

Team leadership · project ownership · Science Communication · analytical thinking

LANGUAGES

French
English
German