XAVIER DELFOSSE

Data Scientist & Life Science Engineer

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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

PyTorch   TensorFlow   Keras   Scikit-learn   XGBoost   Darts   Stable-Baselines3   Gymnasium

Pandas   Dask   DuckDB   MLflow   FastAPI   minIO   Coiled

Python   R   SQL   Matlab   LaTeX   Git & GitHub

MODDE   LabX   Lucullus PIMS

Leadership   Mentoring   Project Management   Science Communication   Attention to Detail   Problem Solving

LANGUAGES

French
English
German