Oriane Kopp

Bioinformatician/Data Scientist

Professional experience and projects

Master's thesis

Inselspital, Bern

Feb. 2025 - Aug. 2025

Impact of contact lenses and pollen allergy on the ocular surface oculaire (under the supervision of Denise C. Zysset-Burri).

- Development of R scripts for data processing, analysing and visualisation
- Implementation of Machine Learning models (Random Forest, SVM) for sample classification
- Statistical analysis of metagenomic and proteomic data

Metagenomics research project

UniFR

Summer 2024

Evaluation of sourmash for metagenome analysis (under the supervision of Laurent Falquet).

- Use of a Linux-based cluster (cloud computing), Bash scripting
- Analysis of metagenomic sequencing data (k-mer based)

PBL in bioinformatics

UniNE

March 2023 - April 2023

Fungicide resistance and climate adaptation of Zymoseptoria tritici (under the supervision of Daniel Croll).

- Genome-wide association study (GWAS) on genomic data
- R programming for data analysis and visualisation
- Use of a computing cluster

Intern activity leader in a Nursing home

Jardins de la Plaine, Yverdon-les-Bains

Spring 2022

Education

Master's degree in bioinformatics and computational biology

UniFR & UniBE

2023-2025

- Data analysis and visualisation, bio/statistics, image analysis, programming in Python, R and Bash, machine learning, deep learning, artificial intelligence
- Genomics, metagenomics, transcriptomics, proteomics, epidemiology
- Additional 26 ECTS in physics, calculus, algebra and statistics
- Overall grade: 5.58/6

Bachelor's degree in biology and ethnology

UniNE

2020-2023

- Social sciences (ethnology, sociology, anthropology, political geography), life sciences (ecology, soil science, ethology, chemistry) and exact sciences (mathematics, statistics, multivariate analysis)
- Interdisciplinary topics: land-use planning, agroecology, biogeography, mapping of scientific controversies
- Overall grade: 5.13/6



Personal information

- Location: Fribourg, Suisse
- Email: oriane.kopp@gmail.com
- **Phone: +41791745582**
- 💂 Portfolio : <u>lieselty.github.io</u>
- Birthday: 26.09.01
- 🚜 Driver's license : Catégorie B

Skills

Languages: Python, R, Bash

Cluster: HPC, SLURM, Linux

Reproducibility: Conda, renv, Docker

Git

Data analysis: Statistics, Machine Learning, Deep Learning, Biostatistics, Data visualisation, Image analysis

Biological data: Genomics, Transcriptomics, Metagenomics, Proteomics, Epidemiology

Languages

French (native)

English (professional proficiency)

German (conversational level

Hobbies

- Reading (Realm of the Elderlings)
- Crocheting
- Roller derby
- Video games (Stardew Valley, PEAK)
- **1** Board games
- Sorting potatoes