# CYRIL MATTHEY-DORET

**Data science engineer at the Swiss Data Science Center**

⚲ **Lausanne, Switzerland**  in **cmdoret**  ⚙ **cmdoret**  ⓘ **0000-0002-1126-1535**

## WORK EXPERIENCE

### Data science engineer
**Swiss Data Science Center**

📅 Jan 2022 – Present   ⚲ Lausanne, Switzerland

- Collaborate with researchers to improve research software practices.
- Work with hospitals to build a FAIR national metadata registry.
- Promote and teach good data management practices.

### PhD researcher in Computational Biology
**Institut Pasteur**

📅 Oct 2018 – Dec 2021   ⚲ France, Paris

- Developed a pattern detection algorithm in Hi-C contact maps.
- Generated chromosome-level genome assembly for the amoeba *A. castellanii*.
- Quantify 3D chromatin changes following infection by intracellular bacteria.
- Implemented good software practices to transform the lab Hi-C processing pipeline.

### Junior Bioinformatician
**University of Lausanne**

📅 Mar 2018 – Jul 2018   ⚲ Switzerland, Lausanne

- Set up a reproducible pipeline to analyze whole genome sequencing data.
- Communicate results with biologist collaborators and team leader

### Helpdesk assistant
**University of Lausanne**

📅 Aug 2017 – Aug 2018   ⚲ Switzerland, Lausanne

- Remote and in-person IT support using the OTRS ticketing service and TeamViewer.
- Developed automation scripts for common processes (backups, integrity checks, …)

## EDUCATION

### PhD in computational biology
**Sorbonne University**

📅 Oct 2018 – Dec 2021   ⚲ France, Paris

### Master in Molecular Life Sciences: Bioinformatics
**University of Lausanne**

📅 Sept 2016 – Jan 2018   ⚲ Switzerland, Lausanne

### Bachelor in Biology
**University of Lausanne**

📅 Sept 2013 – Jul 2016   ⚲ Switzerland, Lausanne

## SKILLS

**Technical knowledge**: Genomics, Statistics, Machine Learning, Data engineering

**Transferable Skills**: Project management, Team work, Oral communication, Scientific writing

**Programming**: Python, R, Bash, Go

**Tools**: Snakemake, Nextflow, Bioconductor, Keras, tensorflow, MySQL

**Software development**: CI/CD, HPC, Containers, Distributed computing, Unit testing

## ACHIEVEMENTS

🏆 **Grants**

- Selected for the PhD fellowship at the University of Lausanne.
- Granted the Pasteur Paris University International PhD fellowship

💬 **Scientific communications**

- Presentations at national and international conferences.
- Author in 5 scientific publications in international journals.

👥 **Teaching**

- Lecturer at EPFL for the Large-scale data science course
- Consultant and Workshop instructor for Physalia courses
- Supervised 2 Master students

## LANGUAGES

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|---|---|
| French | Native |
| English | Fluent |
| German | B1 |
| Mandarin Chinese | A2 |