

David De Ridder, PhD

Data Scientist & Bioengineer

Data Scientist with a PhD in Life Sciences and a background in bioengineering, skilled in healthcare systems, digital health, and epidemiology. I have a solid experience in leading projects turning complex data into clear insights for smart decision-making. Ready to shift from academic research to a broader industry or humanitarian role, I aim to use my skills to solve real-world problems and create significant strategies across different sectors. I'm drawn to roles that offer diverse challenges and the chance to make a meaningful impact.

Professional Experience

University of Geneva & EPFL | Geneva, CH

Senior Research Associate

2022.11 – Current

- Conducting a large project evaluating traditional and alternative medicine's cost-effectiveness using Swiss health insurance data.
- Led a consulting project for the Fondation genevoise pour le dépistage du cancer to improve participation in the breast cancer screening program, facilitating a strategic reassessment of their future communication campaigns and recruitment.

Postdoctoral Fellow

2021.07 – 2022.10

- Led a large COVID-19 project, underlining air pollution's role at detailed spatial scale, while offering insights into epidemic trends and diffusion dynamics.
- Successfully secured funding (CHF 130,000) for a project evaluating integrative medicine's efficacy in collaboration with a large Swiss health insurance group.
- Conducted a strategic mandate for the Direction Générale de la Cohésion Sociale of the Canton of Vaud, focusing on optimizing the adequation between demand and supply in social services.

PhD candidate

2017.12 – 2021.06

- Conducted multiple projects on the geospatial clustering of health risk factors and their determinants to enable targeted and informed public health interventions.
- Led three COVID-19 projects, showcasing the potential of geospatial approaches in enhancing epidemiological surveillance (2 publications including one in The Lancet Digital Health, multiple press releases and TV coverage).
- Key contributor in the decision-making and design process for the @choum project (CHF 250,000), a digital health app for COVID-19 symptom reporting and early outbreak detection (8,000+ downloads in Geneva, 1 publication).
- Co-instructed the "Exploratory Spatial Data Analysis" graduate course to 40+ students at EPFL and instructed in multiple workshops, CAS and MAS, managing up to 80 students.
- Led a consulting project for the Canton of Geneva's Health Department during the COVID-19 vaccination campaign, successfully identifying high-risk groups to enhance the DGS's vaccination strategy optimization.

Réseau Delta | Geneva, CH

Data scientist

2019.02 – Current

- Created innovative data feedback solutions to improve the quality and efficiency of healthcare practices for over 250,000 patients and 1,000 physicians.
- Led the integration of GIS and spatial analyses into Réseau Delta's decision making.

Harvard Medical School - Dana Farber Cancer Institute | Boston, MA, USA

Bioinformatics technician (CCSB | Vidal Lab)

2016.03 – 2017.11

- Performed data analyses (protein network analyses, community detection, DNA sequencing,...) for the human interactome project "HuRI" (Nature, 2020) and yeast interactome project "YeRI".

Graduate student researcher (CCSB | Vidal Lab)

2015.03 – 2015.09

- Thesis "Analysis of Interactome Perturbations Underlying Human Diseases". Identified 173 previously unknown human protein interactions involved in rare human diseases.

Education

PhD Life Sciences | University of Geneva, CH

2017 – 2021

MEng Bioengineering | University of Liège, Belgium

2013 – 2015

- Mobility scholarships for study and research exchanges at Universitat Politècnica de València and Harvard Medical School (total EUR 6000).

BEng Bioengineering | Université Libre de Bruxelles, Belgium

2010 – 2013

Personal Interests

Triathlon, photography, rock climbing, trail running, skiing

Personal info

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📍 Chêne-Bougeries,
Switzerland

🇧🇪 Belgium (Work permit : C)

🌐 [david-de-ridder](https://www.linkedin.com/in/david-de-ridder)

🌐 [daderidd](https://www.github.com/daderidd)

🌐 [david-de-ridder](https://www.kaggle.com/david-de-ridder)

Hard skills

- Research and study design
- Fund acquisition
- Scientific writing
- Remote sensing
- Spatial data science
- Data mining & visualization
- Causal inference
- Machine learning
- Clustering
- Network analyses
- Dashboards & webGIS

Software & programming

Python • R • SQL • PostGIS •
Git • QGIS • MS Office

Soft skills

- Project management
- Leadership
- Problem solving
- Public speaking
- Scientific Communication

Languages

• French **C2**
• English **C2**
• Spanish **B1**
• Dutch **A2**

Certificates

SSPH+ **2022**
Certificate in Public health

HarvardX **2020**
Causal Inference & Diagrams

Harvard Extension School **2016**
Entrepreneurship & Innovation

MIT (edX) **2016**
Computer Science and
Programming using Python

UCL (edX) **2016**
Psychological Components of
Negotiation