



PROFIL

Nationalities: Swiss, Italian

Born in: 1998 (26 yo)

Living in: Sion and Chermignon, Valais, Switzerland.

COORDINATES

✉ BenoitMuller82@gmail.com

🏠 Place du Scex 11, 1950 Sion, CH

☎ +41 78 625 05 01

🌐 @benoitmueller

🔗 benoit-muller.github.io/
->My **personal site** with links
and some academic **projects**



INTERESTS

The **scientific culture**, the **sharing** of knowledge, the art of **problem-solving**, "Everything should be made as **simple** as **possible**, but not simpler."

Sports of any kind. 15 years of **judo**: multiple times **Valais Champion**, bronze medalist at the **Swiss Kata Championships**. **Hiking** and **skiing** in the Wallis Alps.

Benoît MÜLLER

Applied Mathematics Engineer

Seeking opportunities to apply my mathematical and computational skills, such as numerical analysis, across diverse industries.

EDUCATION

EPFL · Lausanne CH

- Master in **Applied Mathematics** (2021-2024) · Numerical analysis track.
- Bachelor in **Mathematics** (2018-2021).

LCP · Sion CH : Maturité Gymnasiale (2013-2018) · Strong mathematics.

EXPERIENCES

Intern - The Countdown company -2024 (5 months)

R&D Group: Augmented an open-source topological optimization code in Code_Aster, and investigated specialized 3D printing path planning strategies.

Associative member - EPFL - 2019 to 2023

- **EscapEPFL**: Communication manager.
- **MA Travel**: Organization and funding of the 2022 trip of the math section.
- **Coaching MA**: Coach of a first year students group, organization of events.

Sportive coach - Judo Team Sion - 2012 to 2018

Direction or assistance of the training for 5-18 years old fighters, management during competitions, referee intern.

COMPETENCES

Mathematics : Strong general background, with a specialization in continuous problems.

Numerical analysis :

- **Continuous Nonlinear Optimization**: constrained & unconstrained, on vector spaces & smooth manifolds, specialized methods for ML, optimal transport.
- **Computational Linear Algebra**: eigenvalues problems, linear systems, low-rank approximation techniques.
- **Differential Equations**: partial & ordinary, finite differences & elements, method of characteristics.

Statistics & ML : Probability, parameter inference, stochastic simulation, regression, dimension reduction, machine learning, deep learning.

Programming : Algorithmics, object-oriented & numerical programming.

Software & languages : Python (NumPy, SciPy), MATLAB, GitHub, LaTeX, MS-Office. Basics of C++, PyTorch, Scikit-Learn, HyperMesh, OptiStruct, Salome_Meca, Code_Aster.

LANGUAGES

- **French** : C2, mother tongue
- **Anglais** : B2, professional working proficiency
- **Italian** : B1, Basics
- **German** : B1, Basics