

# Julien Audiffren, Ph.D. & Pr. D.

Senior Researcher & Senior Lecturer - Fribourg University

@ julien.audiffren@gmail.com

+41 78 648 43 23

<https://jythen.github.io/>

French, Resident Permit C

Age 39

Fribourg, Switzerland



## Profile

Senior Lecturer and Senior Researcher in Machine Learning and Data Mining. Research interests include in Neuro-Symbolic AI, applications to biomedical data, and Large Language Models. Project lead of several data analysis and AI projects, particularly focused on biomedical applications, AI, and Large Language Models.

## Professional Experience

Senior Researcher and Senior Lecturer

Université de Fribourg

Septembre 2019 -

Fribourg, Suisse

- **Topics.** Machine Learning and Data Mining, application to biomedical data, Large Languages Models
- **Selected Projects.**
  - XMLC: Automatic Labeling of documents.
  - DOS: Quantification of human perception with neuro-symbolic AI.
  - Simulkick: Optimal athlete training with AI and augmented reality.
  - X-LLM: Analysis of LLMs' reasoning capabilities

Research Associate

Applied Mathematics laboratory (CMLA), ENS Paris Saclay, France.

Septembre 2014 - Aout 2019

Paris, France

- **Topics.** Machine Learning and Data Mining, application to biomedical data
- **Selected Projects.**
  - 5P: Prediction of frailty among community dwelling elderly.
  - Smartcheck: AI-enhanced analysis of postural control.
  - Ikky: Real time stress evaluation and assisted piloting for helicopter pilots.

Postdoctoral Researcher

QARMA laboratory, Aix-Marseille University

Mars 2012 - Aout 2014

Marseille, France

- **Topics.** Theory of Machine Learning, Kernel theory and Multi-Armed bandits.

## Main Skills

- Machine Learning
- Probability and Statistics
- Biomedical Data Analysis
- Scientific supervision

## Exp. Programmation

Python	11 years
SQL	7 years
R	3 years

## Langages

French	C2	Mother tongue
English	C2	
German	B1	

## Main Research topics

- Theory of Machine Learning
- Explainable AI
- AI for biomedical applications
- Large Language Models

## More Information



40+ scientific publications

<https://scholar.google.com/citations?user=7jcEx7cAAAAJ&hl=en>



4 Patents

Around AI and data mining in medical applications.



Scientific Communication

- Co-founder of the 13minutes Marseille
- Writer for the Data Analytic Post

# Education

Habilitation Thesis (Venia Legendi) in Machine Learning

University of Fribourg

2024 Fribourg, Switzerland

PhD in Mathematics, Probability, and Statistics

ENS Cachan and Aix-Marseille University

2011 Paris and Marseille, France

Master in Mathematics, Probability and Statistics

ENS Cachan

2007 Paris, France

Aggregation in Mathematics and Computer Science

ENS Cachan

2005 Paris, France

Bachelor in Mathematics

ENS Cachan

2005 Paris, France

# References

Philippe Cudré-Mauroux

Professor, Fribourg University

philippe.cudre-mauroux@unifr.ch

Liva Ralaivola

Lead Researcher AI, Criteo

l.ralaivola@criteo.com

Laurent Oudre

Professor, ENS Paris Saclay

laurent.oudre@ens-paris-saclay.fr