

# JIBRIL FREJ

Ph.D. in Computer Science

Postdoctoral Researcher in Machine Learning Applied to Education

## EXPERIENCE

### Postdoctoral Researcher

2022–2024

ML4ED, EPFL, Lausanne, Switzerland

Explainable Job-Market Oriented Course Recommendation System.

**Technologies:** Python, Deep Learning, Recommender System, Reinforcement Learning

### Postdoctoral Researcher

2021–2022

Inserm U1209-IAB, La Tronche, France

Using NLP, Graph Processing, and Information Retrieval for various applications in Bioinformatics.

**Technologies:** Python, R, BERT, GNN, Transformers, Deep Graph Library

### Ph.D.

2017–2021

Université Grenoble Alpes, LIG, Saint-Martin-d'Hères, France

Incorporation of prior knowledge in Deep Learning models for Textual Information Retrieval.

**Technologies:** Python, Pytorch, fastText, BERT, BM25, UMLS, DBpedia, etc.

### End-of-study internship

Feb–Jul 2017

LIG, Saint-Martin-d'Hères, France

Study and implementation of Neural Language Models for Information Retrieval

**Technologies:** C++, word2vec, IR Language Models

### Internship

Apr–Aug 2016

Altatech sc, Montbonnot, France

Study and implementation of machine learning algorithms for defect detection on silicon wafers images

**Technologies:** C++, SVM, vl-feat

## EDUCATION

### Ph.D. student

2017 - 2021

Université Grenoble Alpes

Incorporation of prior knowledge in Deep Learning models for Textual Information Retrieval.

### Master Student

2015 - 2017

UGA - IM2AG

Master of Science in Industrial and Applied Mathematics

### Bachelor Student

2014 - 2015

UJF - IM2AG

Bachelor of Mathematics and Computer Science

### Engineering School Student

2011 - 2014

INSA Rouen

Mathematical engineering department