

# Sami FAKHRY

Github : <https://github.com/Sami-fak/>  
Website: <https://sami-fak.github.io>

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20 years old

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**Address :** 27 Rue Jean de la Quintinie, Saint-Yrieix-sur-Charente, France  
Driver License.

## Technical Skills

Python, C, Unix/Linux, LaTeX, R,  
Mobile development (Swift, Kotlin),  
Machine Learning (Keras, scikit-learn), SQL,  
VHDL

Fluent English C1  
Spanish B1

## CAREER OBJECTIVE

Graduate student in Applied Mathematics and Computer Science (M.Eng. expected in 2023), I have experience in mathematical modelling, AI, and software development. I am keen to work with innovative projects advancing new technologies. I would like to work in Finance in the future (ML applied to finance, quantitative research, ...)

## EDUCATION GRENOBLE INP - ENSIMAG

### ENGINEERING SCHOOL OF APPLIED MATHEMATICS AND COMPUTER SCIENCE - GRENOBLE, FRANCE

MASTER OF ENGINEERING, SEPTEMBER 2020 –EXPECTED JUNE 2023

- Core curriculum in **mathematics** (e.g. information theory, applied probabilities and calculus) and **computer science** (e.g. software development in **Python** and **C**, **algorithmic**, **data structures** and operational research). Algorithmic and computer science projects in group..

## SUMMER SCHOOL

### CENTER FOR RESEARCH IN INFORMATION SCIENCES, TECHNOLOGIES AND ARCHITECTURE - LISBON, PORTUGAL

JUNE 2019

- One week **IOT project in group** using Lora technology
- Data collection, analysis and prediction with Python (**scikit-learn**)

## BORDEAUX INP

### PREPA DES INP - BORDEAUX, FRANCE

SEPTEMBER 2018– JUNE 2020

- Two-year intensive undergraduate program axed on mathematics, physics and computer science to prepare top French engineering schools

## HIGH SCHOOL DIPLOMA

### BACCALAURÉAT WITH DISTINCTION AND HONORS 19/20 | ANGOULÊME, FRANCE

JUNE 2018

## WORK EXPERIENCES

### GIPSA-LAB | MATHEMATICAL LABORATORY, GRENOBLE, FRANCE

#### INTERN RESEARCHER

JUNE 2021 – JULY 2021

- Under supervision of Romain Couillet.
- Optimization of Deep Learning Algorithm in order to reduce their cost.
- Implementation in Python.
- Transfer Learning

### WELLPUTT | START-UP, ANGLET, FRANCE

#### MOBILE DEVELOPER

MAY 2020 – FEB 2021

- Led Android Development in Kotlin on Android Studio, in close coordination with the client.
- Versioning using Git
- IOs development in Swift in a three-person team led by a senior software engineer.
- Sqlite Database management.

### VITIROVER | START-UP, SAINT-EMILION, FRANCE

#### ENGINEERING ASSISTANT INTERNSHIP

APRIL 2020 – JULY 2020

- Software development for micro-robotics to detect mechanical malfunction through audio signals.
- Real-time frequency analysis of audio signals and of accelerometer, using FFT computation in C and Python.

## PERSONAL PROJECTS

- Coding competition/Problem solving: CodinGame (lafak), Euler Project (lafak), Coding Battle le Shaker.
- Challenge Data & IA Neovision: Led a team of three in an AI competition. Vgg-net implementation in Keras with data augmentation.
- Machine Learning: Stanford (Coursera), Hands-On Machine Learning (Aurélien Géron)
- Finance: Options, futures and others derivatives, John Hull

## INTERESTS AND ACTIVITIES

- Kickboxing K1 light, semi-finalist at France championship (2018).
- Co funded a funk band music of 8 musicians (including me) over 2 years. Won the public title of the "Tremplin des lycéens charentais" in 2018. Recorded a 4 titles album.
- Literature : Dostoïevski, Frankl, Jancovici, Nassim Taleb..