JULES MABON

INGINEER IN DATA-SCIENCE

PhD Student at INRIA Sophia Antipolis

TRAINING

2016-2019 — **Master's degree in Engineering** at *Ecole Centrale de Lille*
One of the top multidisciplinary engineering schools in France
Common core : Aero/Hydrodynamics, Thermodynamics, Signal processing, Project management, Materials science etc...

Specialization : Option DAD (Decision & Data Analysis) : Probability and statistics, optimization, **machine learning** ...

2018-2019 — **Applied Mathematics** (Master 2) at *Université de Lille*
Functional analysis, Stochastic process, Itô integrals, Statistical physics

2018 — M.O.O.C. : **Machine learning**, Stanford University
Online courses on Coursera

2014-2016 — *Classes Préparatoires aux Grandes Ecoles*

PROFESSIONAL EXPERIENCE

2019
6 months
Research internship at **EMBL-EBI** in Cambridge

Final year intership in **Virginie Uhlmann's research group**. Improving **detection** and **tracking** of individual *Mycobacteria smegamtis* in time lapse microscopy images of growing colonies, using **graphical models** and **convolutional neural networks**.

2018
4 months
R&D Internship at **NU!** (startup in Paris)

Research, development and documentation on a **product recognition system** for a "connected fridge" using image processing. **Experimentation** on several methods from simple image differences (**OpenCV**) to **neural networks** for object recognition (**Tensorflow**).

2018
Research project : in computer science with **CRIsTAL**

Initiation at research work on the subject of **matrix factorization for recommendation systems**. Study of research publications and implementation of machine learning and optimization algorithms to produce such recommendation systems such as used with Netflix or Spotify.

2016-2018
Group project : «Hôpital sous tension»

Use of **multi-agent systems** to simulate and observe sources of **tension** in the emergency services of the **Hospital Center of Lille** in partnership with computer science laboratory **CRIsTAL**.
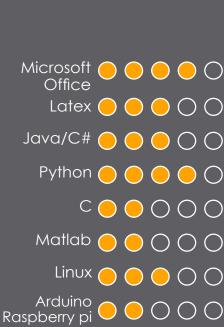
2017
4 weeks
Internship at **Thales Skycenter Innovation Lab**

HOBBIES

Creation and presidency of a **graphic arts club** at *Ecole Centrale de Lille* aiming at sharing skills and techniques among the students and also organize creation workshops and training.

Art : Drawing, Making posters, logos, paper craft, 3D modeling / animation (Blender 3D) (**personal portfolio**)

Music : Electric and acoustic guitar

LANGUAGES

French ●●●●●
English ●●●●○
Spanish ●●○○○
German ●○○○○

SKILLS

Microsoft Office ●●●●○
Latex ●●●○○
Java/C# ●●○○○
Python ●●●●○
C ●●○○○
Matlab ●●○○○
Linux ●●●○○
Arduino Raspberry pi ●●○○○
Catia V5 ●●○○○
Photoshop ●●●○○
Illustrator ●●●●○
Blender 3D ●●●●○