

# Maël FABIEN

## Education



**Data Scientist**  
(23 years old)

Nationality: France, Luxemburg

+ (00) 33 7 87 20 40 33

mael.fabien@gmail.com

10 rue du Roi de Sicile, 75004  
Paris

### Bachelor of Science

Economics  
HEC Lausanne



Economics, Statistics,  
Financial Mathematics

2013 - 2016

### Master of Science

Actuarial Science  
HEC Lausanne



Statistics, Mathematics,  
Stochastic Processes

2016 - 2018

### Specialized Master

Big Data & Data Science  
Telecom Paris



Big Data, Machine Learning,  
Deep Learning, NLP,  
Computer Vision

2018 - 2020

## Social



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



<https://github.com/maelfabien>



<https://www.linkedin.com/in/mael-fabien/>

Medium

<https://medium.com/@mael.fabien>

## Language

- French (Mother Tongue)
- English (C2) (Bilingual Scientific Baccalaureate)
- German (B2)

## Interests

- ML and Data Science
- Sports (Fitness, hiking)
- Travel (South East Asia, New Zealand, South America)

## Experience



**11.2019 - 12.2019 : NLP Consultant, Orange, Senegal**

Created a chatbot to reduce the rate of human answers using weighted Word2Vec and LSTM intent classifier. Gave an NLP lecture in front of data teams.



**07.2019 - 11.2019 : Data Scientist Intern, Paris**

Algorithm engineering to automatically understand what a user wants to extract from a text by example. Used tree-based structures and genetic algorithms. Worked with back-end engineers. Algorithm currently in the app.

*Python, Algorithm optimisation, Natural Language Processing*



**03.2019 - 07.2019 : NLP Data Scientist Intern, Remote**

Designed and implemented a Semantic Similarity Search Engine for a messaging service. Implemented Bert for next sentence prediction.

*Python, Search Engine, Hierarchical Embedding, BERT, Transformers*



**09.2018 - 06.2019 : Deep Learning Research Project, Paris**

Research project for the French employment center on multimodal emotion recognition for Text, Sound and Video. Built a web app on top with Flask.

*Python, NLTK, Keras, Tensorflow, Flask, HTML, CSS*



**02.2018 - 08.2018 : Non-Life Actuary Intern, Vaudoise, Lausanne**

Redesign of a private Accident Insurance product. Statistical analysis, anomaly detection, product pricing (MLE, robustness tests, profit testing, simulations).

*R, VBA, Tableau*

## Entrepreneurship



**2019: Hackathon Winner**

Winner of the 2019 « Hubs as a service » Hackathon. Developed a mobile medical service for rural areas, a booking platform and a pre-diagnosis tool using NLP. Won a 5'000 euros prize.



Wanago

**2016 - 2018 : Founder of Wanago**

Crowdfunding platform for van acquisition. Jury Prize winner of the Entrepreneurial Contest Start Lausanne after a 6 months competition among 65 startups, with 5'000 euros prize.

## Teaching



**09.2019 - Now : Data Science Instructor**

Data Science Instructor for Stat4Decision in the banking industry. Average grade received: 9/10.



**02.2019 - Now : Machine Learning Instructor**

Machine Learning Instructor for VIVADATA Bootcamp. Created course supports and gave over 35 lectures on Stats, ML, DL and Data engineering in Paris and Dakar.



**09.2016 - 03.2018 : Student Teaching Assistant**

Student Teaching Assistant for the 3rd year Bachelor courses of Corporate and Public Finance, 40%, side of my studies.

# Writing

## **Stat4decision** 09.2019 - Now : AI Writer

Data science company

Contributing to Stat4Decision's blog in French.

## **Towards Data Science**

### 08.2019 - Now : Editorial Associate

Editorial associate role at TDS. Working part-time on AI articles review and content creation.



### EXPLORIUM 03.2019 - Now : AI Writer

Contributing to Explorium's blog, a Data Science platform startup in Israel. Examples :

<https://www.explorium.ai/blog/whos-the-painter/>,

<https://www.explorium.ai/blog/interpretability-and-explainability-part-1/>



### 09.2018 - Now : Blog Writer

I started writing a data science blog in which I share articles (over 100 so far) and tutorials on Statistics, Machine Learning, Deep Learning, Reinforcement Learning, Data Engineering... and detailed projects from scratch. <https://maelfabien.github.io/>. I share some of my articles on Medium and earned earlier this year the « Top AI writer » badge.

# Technical Stack



#### Daily user :

- Python (Pycharm, Jupyter, Sublime Text...)
- Machine Learning libraries: Sk-learn, NLTK, Scipy, OpenCV
- Deep Learning frameworks: Keras, Tensorflow, PyTorch

#### Frequent user :

- Spark (PySpark, Scala) R (RStudio), Matlab
- SQL (Postgre, MySQL)
- Cloud : AWS (EMR, EC2...), Google Cloud Platform
- HTML, CSS, Flask

#### Used in several projects :

- Hadoop
- Cassandra, MongoDB, Neo4j
- Hive
- ElasticSearch, Kibana

# Talks

## 12.2019 - Natural Language Processing

Gave a 4 hours introduction to NLP (Similarity, Classification, Generation, QA, LSTM, Seq2Seq) at Orange Senegal.

## 04.2019 - Entrepreneurial experience in data

I shared my story and how entrepreneurship helps me on a daily basis to become more efficient. Start Lausanne contest 2019.

# Recent Projects

## Mutli-purpose Data Science App

Developed a multi-purpose application gathering pre-trained NLP, Computer Vision and generative models as well as self-trained ones.

<https://github.com/maelfabien/DataScienceApp>

## fsText : Few Shot Text Classification

Created fsText, a few-shot learning text classification library on GitHub, using pre-trained embeddings and siamese networks.

<https://github.com/fsText-suite/fsText>

## Language Generation Model

Created a language generation model using Tensorflow. I trained the model on my own articles.

<https://towardsdatascience.com/i-trained-a-network-to-speak-like-me-9552c16e2396>

## What language is this? Language Recognition

Built a Language Recognition web app using Markov Chains and a web scraper for Wikipedia.

[http://maelfabien.github.io/machinelearning/HMM\\_3](http://maelfabien.github.io/machinelearning/HMM_3)

## GANs for face generation

Built a GAN for face generation using Facial Emotion Recognition 2013 database.

## Data Engineering Project

Processing large amount of data (GDELT database) using AWS EC2, Cassandra and Spark.

<https://github.com/maelfabien/Cassandra-GDELT-Queries>

## Open Machine Learning Tutorials

Published Machine learning tutorials on GitHub (NLP, Computer Vision, Reinforcement learning)

[https://github.com/maelfabien/Machine\\_Learning\\_Tutorials](https://github.com/maelfabien/Machine_Learning_Tutorials)

