

MICHEL OMAR AFLAK

CS Master Student

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EXPERIENCE

Twitter, London — *Software Engineer Intern*

Jun 2019 – Sept 2019

- Worked with Media Client Infrastructure team. Improved video quality on high speed networks by developing a bitrate prediction model, mobile side. A/B tested on 6M users, observed an increase in ads revenue by +0.56%, # of retweets by +0.74%, # of likes by +0.25%.

Zenly (Snapchat), Paris — *Software Engineer Intern*

April 2020 – Aug 2020

- Developed a graphic tool library on Android allowing to draw, animate, write text and play GIFs on top of images and videos, including an undo/redo framework, with a focus on memory management.
- Improved video encoding settings.

RandomCoffee, STATION F Paris — *Software Engineer Intern*

Dec 2018 – Feb 2019

- **RandomCoffee** get employees in a company to meet each other based on their preferences. Generalized the way of expressing matching rules.
- Developed a matching algorithm (derived version of K-Medoid) that can match any number of people together instead of only 2 previously, given a set of constraints.

Tribe, Los Angeles — *Machine Learning Intern*

Jan 2018 – Feb 2018

- Tribe is a live multiplayer gaming platform that raised \$6.5M from Sequoia Capital, Kleiner Perkins, and others. Developed a mobile embedded machine learning model able to recognize hand gestures.

EDUCATION

École Centrale d'Électronique de Paris – *Engineering School*

Sept 2017 – Present

Computer Science, Data Science, Big Data, Mathematics

INSEEC London – *Engineering School*

Sept 2018 – Dec 2018

Image Processing, NLP, Blockchain

Institut Supérieur d'Electronique de Paris – *Engineering School*

Sept 2016 – Jul 2017

Control Theory, Calculus & Linear Algebra

SOME PERSONAL PROJECTS

Machine Learning Library from scratch

2020 — Now

Four years ago, I decided to learn AI and more specifically neural networks. I taught myself by reading on the internet, and managed to get a strong understanding of how neural networks work both mathematically and programmatically. I developed a machine learning library akin Keras **on GitHub**. I wrote **an article on Medium** that got published in Towards Data Science, and gave a talk/lesson within the organization School Of AI in Paris.

Leaf

Sept 2019 — April 2020

Leaf is a device with radio capabilities that can be plugged directly in a smartphone. People using Leaf form a **mesh network** that allows them to communicate over long distances (up to 3km between each node) without any internet connection. This personal project was POC to demonstrate possible alternatives for private decentralized communications.

AWARDS

France Engineering Olympiad — *Schneider Electric, Paris*

May 2016

“*Best Scientific Innovation*” award. 6th national place, 2nd regional place. Arrow impact prediction system.

Paris Engineering Olympiad — *GRDF, Paris*

May 2015

3rd regional place, reached national competition. Gyroscopic mouse designed to filter essential tremors (movement disorder).

SKILLS

Programming	C++, Java, Kotlin, Python, NodeJs, Javascript
Tools	Git, Shell, Firebase, LaTeX, Make, CI, Docker
General	Mathematics, Machine Learning

LANGUAGES

French	Fluent
English	Fluent
Arabic	Fluent