# Ismael Ouattara

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# Student at Ecole Polytechnique/Telecom Paris Looking for security and machine learning job

### Education

Telecom Paris and Polytechnic Paris Institute, Palaiseau, France's leading schools of informatic 2021 - 2023Spécialization: Cyber Security, Machine Learning and Mobile Network, Degree: Engineer/Master. Master IP Paris in Machine Learning, Communication and Security.

Ecole Polytechnique, Palaiseau, One of france's leading schools of science and engineering 2018 - 2022Spécialization: Cyber Security and Machine Learning, Degree: Engineer/Master. Courses followed: Computer Science(Computer Architecture, Network and Information Security, Cryptology, Distributed Computing, Machine and Deep Learning, Compilation), Applied Mathematics(Statistics, Markov Chain).

2016 - 2018 INP-HB, Yamoussoukro, Ivory Coast, Intensive undergraduate program leading up to competitive nationwide entrance examinations to the Grandes Ecoles de France (Classes préparatoires MPSI)

# Work experience

April 2022 - October Part-time Security Engineer, MITHRIL SECURITY, Paris, France

O Defenses against model extraction and membership inference for Deep learning Model.

March 2022 - Research Intern, ALCATEL-LUCENT INTERNATIONAL NOKIA BELL LABS, Nozay, France

Sep2022 O ML based detection Anomaly/attacks on 5G network using knowledge graph convolutional network.

O Nokia decided to fill a patent (as standard essential) on a result found during our work.

April 2022 Part-time teacher, ISEP, Paris, France

O Teacher for Intrusion detection system Lab.

April 2021 – August Research Intern, INRIA, Rennes, France

2021 O Design of a meta model of **cryptographic architectures** for verifying compliance with the good practice.

June 2020 – August Summer Intern, CIE, Abidjan, Côte d'Ivoire

2020 O Detection of anomalies on electrical installations from aerial images using Keras, Tensorflow and Pytorch.

### Project

#### September 2018 - Working on projects

March 2022

- o Implementing a point-to-point communication system of an optical fiber, a generative deep neural network representing the channel, a predictive model for the receiver.
- o Implementing a **seq2seq model** to predict CIM-10 code from a diagnostic (**NLP**).
- o Setting up a dynamic pricing using reinforcement learning and recommandation system on sales platforms.
- o **Predicting** which driver signups are most likely to start driving for uber and the number of retweets of a tweet.
- o Implementing IoT attack: Kill switch, DHCP spoofing, Tcp syn flood, DNS Hi Jacking.
- o Implementing snort rules to build firewall for securing a local network and yara rule to detect malwares.
- O Implementing a mini c compiler using java.

# Voluntary experience

September 2022

Junior Conference on Wireless and Optical Communications, Telecom Paris, Palaiseau, France O Presenting my work on False Base Station Detection.

June 2019 - March Member of X-Afrique, Ecole Polytechnique, France

o X-Afrique works towards promoting the african culture, personal and professional opportunities in Africa.

September 2018 Leadership and military training, French army, La Courtine, France

o Command exercises to develop leadership and teamwork; military training to improve the mental strength.

#### Skills

#### Computer knowledge

- o Programming languages: C, C++, java, python, Rust, R; Assembly language: X86.64; OS: Unix, Windows.
- o Network protocols: IP, TCP/UDP, DNS, DHCP, HTTP; Tools: Docker, Github(Ouatt-Isma), Zotero.
- o Webmastering and data management: HTML5, CSS3, JavaScript, PHP, My SQL, Wordpress.

o French (native), English (advanced), Chinese (beginner), Spanish (beginner).