Ismail AKROUT

Researcher & Machine Learning Enthusiast

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Education

2020 – Present	**Institut Polytechnique de Paris (IPP)** Master 2 MICAS program *Machine learning, Communications and Security*
2018 – 2019	**MITx** MIT Statistics and Data Science MicroMasters
2014 – 2019	**National Institute of Applied Science and Technology (INSAT)** Bachlor of engineering *Specialization: Data science* Graduated with high honors
2010 – 2014	**Lycée Tinja** High-School Diploma Graduated with high honors

IT Skills

Programming	C++, Python
Softwares and tools	*Big Data*: Hadoop, Spark *SCM*: Git, SVN *Unix System Administration*

Communication Skills & Hobbies

Languages	*Arabic* : Native *English* : Fluent *French* : Fluent
Associations	Securinets Technical Manager and CTF challenges Manager, Co-lab INSAT advisor
Hobbies	Violin and piano practice, e-sports

Certifications & Distinction

July 2019	**RLDM 2019 Travel Grant Award** *800€ Scholarship*
2017 - Present	**Multiple Online Certificates** *MITx, Courseras, IBM quantum challenges*

Professional experiences

September 2020 – Present

Research Assistant | *IBT, France*

- Working on bias mitigation and fairness in artificial intelligence's algorithms.
- Designing bias-free multi-sided platform and recommendation system.

September 2019 – December 2019

Teaching Assistant | *INSAT, Tunisia*

- Teaching the deep learning and reinforcement learning course.
- Support the design of the programming assignments.

February 2019 – August 2019

Graduation Internship | *Télécom Paris-Tech, France*

- Classification of job offers using unsupervised learning based on RNN autoencoders data representation.
- Creating an infrastructure to clean the data and store it, asynchronously.
- Approximate the data distributions using multivariate Gaussian mixture.

Publications

Hacking Google reCAPTCHA v3 using Reinforcement Learning | *RLDM 2019*

Ismail Akrout*, Amal Feriani, Mohamed Akrout. [Paper]

- Trained RL agent to bypass reCaptcha v3 bot test
- Developed an environment to interact with reCAPTCHA system

Academic projects

October 2018 – November 2018

Finance class: **Cap-Fix log analyser**

INSAT, Tunis, Tunisia

- Extracting **Cap-Fix** Log from Trading center log files, using **BASH scripts** to minimise parsing time.
- Visulising log data using **ELK stack**: Elasticsearch, Kibana, Logstash.