



“Nothing is out of reach, as long as you just sit down and take the time to read from the beginning.” - Life lesson.

## Summary

I have acquired a solid understanding and hands-on experience in Cloud computing and Machine Learning throughout my academic and internship journey. I love crafting technological solutions in my spare time to upgrade my own neural networks, like the Euro coin recognizer for my coin collection. **I am seeking a role and opportunity from which I can learn and grow, while showcasing my know-how.**

## Experience and Projects

### SERMA Safety and Sercurity - SERMA GROUP

Rennes, France

MACHINE LEARNING ENGINEER - INTERN

Feb. 2024 - Aug. 2024

- I developed a PCB components detector Model and reference extraction with Yolov, EasyOCR and Idefics2.
- I customized the Neural-based Decompiler Framework (N-Bref) from the Meta FAIR in order to apply it to reverse engineering.
- I built a fully automated CI/CD pipelines from a self-hosted gitlab to a local cluster Machine using K8s and Ansible.
- This innovative solution helped reducing the overall time spent by hardware pentester thorough security assessments.

### IMT Atlantique.

Rennes, FRANCE

RESEARCH ASSISTANT - INTERN / TEAM : ADOPNET

May. 2023 - Sep. 2023

Topic : Energy Efficient Mobile Network in France.

We developed 3 strategies to save energy for different scenarios, based few key factors and improved the EARTH Model.

- I Acquired and Prepared data (ETL with PowerBI) from ANFR and used Queue Learning for future traffic load adaptation.
- I Applied the approach to real traffic Load data in Rennes, FRANCE and were able to save up to 20% of energy.

### RECENT PROJECT (Masters)

Rennes, FRANCE

-PERSONAL PROJECT 2: **SYSTEM ARCHITECTURE DESIGN AND DEPLOYMENT OF THE SUPERAPP AZPLUS.MG BASED IN MADAGASCAR.**

-PERSONAL PROJECT 1: **EURO COIN RECOGNIZER USING COMPUTER VISION ON MOBILE, FOR COIN COLLECTION PURPOSE (1€, 2€).**

2022 - Now

-MASTER 2 : **NOISE PROCESSING WITH RASPBERRY PI TO PREDICT QUEUES, CLOUD-BASED SPEECH TO TRANSCRIPT USING NLP .**

-MASTER 1: **MINI TEXT EDITOR , 5G ANTENNA SCHEDULER SIMULATION , INSTACART DATA MINING.**

### Videotron Inc. Quebec

Cairo, EGYPT

IT SUPPORT AND TRAINER

2020 - 2022

- I was responsible of the Anti-virus, AWS S3 Backup recovery, Network maintenance. Escalate major cases to Engineering team.
- I trained new agent on new techno.

## Education

### University of Rennes & EIT Digital Master School (Taught in English)

Rennes, FRANCE

M.SC IN CLOUD AND NETWORK INFRASTRUCTURE , MINOR : INNOVATION AND ENTREPRENEURSHIP (INTERNATIONAL)

Sept. 2022 - Aug. 2024

- Main topic : Smartcity Services, Bigdata, Distributed Systems,Service Technology, Advanced Cloud Infra., Fog Computing
- Grade : Good.

### Faculty of Computers and AI - Cairo University (Taught in English)

Cairo, EGYPT

B.SC. IN ARTIFICIAL INTELLIGENCE, MINOR: INFORMATION SYSTEMS

Sep. 2016 - Aug. 2020

- Grade : Very Good.
- Secured a mixed Egyptian and Malagasy Government Scholarship for outstanding grades.

## Extracurricular Activity and Interest

### ELTE UNIVERSITY | INFORMATIKAI KAR | Title : Democratize the use of technology

Budapest, HUNGARY

SUMMER CLASS WITH ERASMUS+ (SCHOLARSHIP)

Jun. 2023 : 2 Weeks

- The ability to showcase my engineering background through an innovative project (V2V Grids), followed by and engaging pitch
- Grade : Excellent
- Core Value : Leadership, teamwork, pitching, innovation, technology watch,Project Management.

### SKILLS AND INTERESTS

A READER, A BIKER AND AI ENTHUSIAST

- **Soft Skills** : Leadership, Teamwork, commitment, Problem-solving, Documentation, Engaging Presentation, Article writing.
- **Certificates** : Deep Learning with Pytorch, ML Pipeline with Azure ML, Dataviz using Plotly
- **Programming Language** : Python, Java, SQL(PostgreSQL).
- **Miscellaneous** : Docker, Git, Kubernetes, GCP, AWS, Shell(Bash), Microservices, RestAPI
- **Language** : English(C1 - IELTS : 7.5) , French(C1), Malagasy(Native).