AHMED-RAFIK-EL MEHDI BAAHMED

STATE ENGINEER IN COMPUTER SYSTEMS ENGINEERING & DOCTORAL RESEARCHER (PH.D)

BIOGRAPHY

- **Computational Efficiency of Federated Learning techniques on Edge-Cloud Infrastructures Researcher**
- Computational Intelligence & Deep Learning keen, ML Developer
- IoT Developer & Solution Architect
- Python developer
- Team work, Creative, motivated, ambitious.

INTERESTS

- Federated Learning
- Edge-Cloud Infrastructures
- Computational Efficiency and Energy Management
- Internet of Things (IoT)
- Data Science
- Embedded systems
- Astronomy & astronautics lover
- Traveling, learning and reading, sport, music, drawing, gaming.

PROJECTS

- **ESI Weather (Mar - Sept 2020)**
- **HEALTHLINE (Mar - Jul 2021)**
- **Lectio (Dec 2021 - Feb 2022)**
- **Màtia-ArtificialEye (Apr - Jul 2022)**
- **Alzheimer.AI (Nov 2022 - Feb 2023)**
- **E-GNNExplainer (Feb - Jul 2023)**

EDUCATION

- **Doctoral Researcher (Ph.D) at ENSAM working at CESI LINEACT - France**
- **State Engineer in Computer Systems Engineering with a Master's Degree graduated from The Higher School of Computer Science 08 May 1945 - Sidi Bel Abbes - Algeria - in July 2023**
- **Baccalaureate in Maths 2018**

CONTACT

- ahmedrafikelmehdibaahmed@gmail.com
- eagleeye1107.github.io
- EagleEye1107
- Ahmed Rafik El-Mehdi BAAHMED

EXPERIENCE

- **Doctoral Researcher (Ph.D) at ENSAM working at CESI LINEACT - France**
- **E-GNNExplainer** Paper Acceptance and Participation at **XKDD 2023**: 5th International Workshop on eXplainable Knowledge Discovery in Data Mining.
- Deep Learning intern at **LIRIS Lab (DM2L) - INSA Lyon (Feb - Jul 2023)**.
- Project Developer & Manager of "**Alzheimer.AI**" a Computer Vision and Deep Learning-Based "Early Detection of Alzheimer's Disease System" using multiple approaches **(Nov 2022 - Feb 2023)**.
- Project Manager of "**Màtia-ArtificialEye**" project which is a Computer Vision and Deep Learning-Based support system for Visually Impaired People in an outdoor environment **(Apr - Jul 2022)**.
- Practical internship at **GSH** "Groupe des Sociétés HASNAOUI" **(Sept 2021)**.
- Web Developer and Quality Insurance Manager of "**HEALTHLINE**" project.
- Participation in **COC'2021 (Mar 2021)** and **COC'2022 (May 2022)**.
- Cybersecurity Instructor & Trainer in The Alphabit Cybersecurity Cell.
- Project Manager of "**Esi Weather**" an **AI** weather station **(Mar - Sept 2020)**.

CORE COMPETENCIES

IT KNOWLEDGE & SKILLS

- Neural Networks Development (GraphNN, CNN, MLP, FFNN).
- Pytorch and Keras frameworks.
- Supervised & Unsupervised Machine Learning approaches.
- Computational Intelligence paradigms (DNN, FL, ANFIS, GA, GP)
- Explainable Artificial Intelligence methods (XAI)
- Computer vision & Image processing.
- Graph Theory & Geographic Information Systems.
- IoT Development and Solution Architecture (Edge-Fog-Cloud).
- WSN, LoRa, Sigfox, MQTT Protocol, Kafka Broker, IoT Cloud Platforms.
- Arduino & Raspberry Pi.
- Problem Solving & Automating tasks.
- Programming : Python, C/C++, SQL / DevOps : Git, GitHub, Docker.

SOFT SKILLS

- Leadership & Project management.
- Critical thinking & Problem solving.
- Communication & Public speaking.
- Flexible & Dynamic.
- Time management & Punctual
- Languages :
  - **Arabic**
  - **French**
  - **English**

CERTIFICATES

- Certificate of participation in the international conference **COC'2022**.
- Certificate of participation in the national conference **CICT'2022**.
- Certificate of participation in the international conference **COC'2021** (paper link : **HAL**).
- Introduction to Bash Shell Scripting with **Coursera Project Network**.
- Elements of Artificial Intelligence.
- Managing Machine Learning Projects with Google Cloud.
- Penetration Testing, Incident Response and Forensics.
- Cybersecurity IT Fundamentals Specialization with **IBM**.