

# AGNOX

<b>Intitulé de l'équipe</b>	<b>Artificial Intelligence Geo-decision Networking Optimisation And Cybersecurity</b>
<b>Responsable</b>	<b>Pr. NAJID Abdellah</b>
<b>Email</b>	<a href="mailto:najid@inpt.ac.ma">najid@inpt.ac.ma</a>
<b>Vision</b>	<p>The AGNOX project-team aims to carry out research to develop new techniques to improve the processing and analysis of data in the field of health, the field of agriculture and in the field of Medical Internet of thing by integrating AI and ML algorithms. Also conduct research on the use of geo-decision to improve the performance of smart cities, smart transport, smart marketing and drone navigation based on geolocation data.</p> <p>The research team will also be responsible for conducting research in the field of modeling, optimization and simulation of wireless networks, which is the technology used by most communication systems such as the IoT, networks WSN wireless sensors, 5G/6G mobile networks. The common concern that poses a great challenge to the scientific community today is the optimization of energy consumption in order to guarantee great energy autonomy. To do this, we can proceed by modeling and optimizing the communication protocols used in these networks. We can cite the development and optimization of new routing protocols by integrating AI and ML techniques.</p> <p>In this context, the presentation of original ideas must imperatively be based on clear and objective elements of comparison based on quantitative and qualitative evaluation techniques. The role of our research team is to propose and defend high-performance algorithms through measurement or simulation results.</p> <p>Faced with the rise of security issues, the AGNOX team is looking into the use of AI techniques, ML and BlockChain technology to propose new methods for detecting intrusions and cyber-attacks in cyber physical systems.</p>
<b>Axes de recherche</b>	<ol style="list-style-type: none"><li>1. AI, machine learning, Data analytics for healthcare, MIoT and agriculture</li><li>2. Geo-decision applied for smart transportation, smart city, agriculture, drone navigation, Smart marketing...</li><li>3. Modelling, simulation, optimization for wireless networking system (WLAN, 5G/6G, WSN, IoT,)</li><li>4. AI for Cyber physical system CPS and blockchain technology</li></ol>

Membres permeants d'équipe

<b>Membre</b>	<b>Spécialité</b>
A. NAJID Professeur d'enseignement Supérieur à l'INPT	Wireless Networking, IoT, WSN, Routing optimisation , Antenna and Microwave Design
A. ELKHADIMI Professeur d'enseignement Supérieur à l'INPT	Satellite Communication, SIG, Geo-decision, traffic Networking
B. BENAMEUR Professeur d'enseignement Supérieur à l'INPT	IoT, Embedded electronics
H. ELGHAZI Professeur d'enseignement Supérieur à l'INPT	Signal Processing, WLAN, Cybersecurity,
I. LAHSEN-CHERIF Professeur assistant à l'INPT	AI, ML, System Optimisation
O. AITOUALHAJ Professeur assistant à l'INPT	BLOCKCHAIN, IoT, WLAN, Optimisation
A. ROUIJEL Professeur assistant à l'université Med V	Signal processing - Cybersecurity - Machine Learning - Tensor - Data ...