

AGNOX

Team title	Artificial Intelligence Geo-decision Networking Optimisation And CyberSecurity
Team head	Pr. EL KHADIMI Ahmed
Email	khadimi@inpt.ac.ma
Vision	<p>AGNOX is a multidisciplinary team whose principal mission is to conduct scientific research to develop new techniques and provide concrete solutions for current issues in the field of health, agriculture and the Internet of Things by integrating AI and ML algorithms.</p> <p>Also conduct research on the use of geo-decision by exploring geospatial information through data processing and analysis tools to help decision makers to take the better strategic decisions in the field of smart cities, smart transportation, smart marketing, and drone navigation. The AGNOX team will also be responsible for conducting research in the area of modeling, optimization and simulation of wireless networks, which is the technology mostly used by most communication systems such as IoT, wireless sensor WSNs, 5G/6G mobile networks.</p> <p>The common concern that poses a great challenge to the scientific community today is the optimization of energy consumption to ensure high energy autonomy. To do this, we can proceed to a good modeling and optimization of communication protocols used in these networks. We can mention 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 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 efficient algorithms through measurement or simulation results. Faced with the rise of security issues, the AGNOX team is interested in using AI, ML and BlockChain technology to propose new methods for detecting intrusions and cyber-attacks in cyber-physical systems.</p> <p>Keywords : Geodecision, Optimization, AI, ML, IoT, Cybersecurity</p>
Research fields	<ol style="list-style-type: none">1. AI, machine learning, Data analytics for healthcare, MIoT and agriculture2. Geo-decision applied for smart transportation, smart city, agriculture, drone navigation, Smart marketing...3. Modelling, simulation, optimization of wireless networking system (WLAN, 5G/6G, WSN, IoT,)4. AI for Cyber physical system CPS and blockchain technology